The Journal of the American Medical Association

Published Under the Auspices of the Board of Trustees

VOL. 141, No. 10 — CHICAGO, ILLINOIS — NOVEMBER 5, 1949

COPYRIGHT, 1949, BY AMERICAN MEDICAL ASSOCIATION

REPRODUCTION IN THE OLDER WOMAN

Chairman's Address

L. A. CALKINS, M.D., Ph.D.
Kansas City, Kan.

Medical history records many myths and superstitions surrounding the practice of obstetrics. Each of the past several generations felt that it had made great progress, and we are now advised that "modern" obstetrics is far ahead of the practice of former years. This is no doubt true; yet, there remain many fads and fancies, changing a bit from time to time but still not too far removed from some of the myths and superstitions of bygone times.

A careful search of the literature reveals that many of our accepted facts of today are based on the study of an extremely small number of patients. The late Dr. William E. Caldwell made the observation that the long-accepted normal measurements of the female pelvis were based on the measurements of only 50 women. The work of Caldwell and of others, in recent years, has given us the information that the female pelvis is considerably smaller than was formerly believed. Similarly, one can begin the study of almost any so-called clinical fact and, without too prolonged an investigation, find that the accepted belief is at least in part false. Dr. E. D. Plass, a number of years ago, made what is to me the most significant statement I have ever heard when he said, "I doubt everything in medicine." This statement is unique in that it represents the sweeping conclusions of a thoroughly trained mind and an experienced investigator. It is also outstanding in that it shows the errors in our medical knowledge and the great need for improvement therein.

A great part of the reason for the continuance of mistaken beliefs is the attitude of the medical student and the practicing physician that whatever appears in a textbook is to be accepted as fact. Were we to analyze the problem confronting the writer of a textbook, we should at once realize that such a book is to a great extent merely a copy of previous books. If this fact were generally recognized, such books would be read with more discrimination and we should have a much healthier viewpoint and approach to medical knowledge.

The "old primipara" was said many years ago to offer a hazard with respect to herself and to the baby. This idea has been and still is being repeated in textbooks. Each of us will have at least an occasional patient in this category who does have difficult labor, hypertensive cardiovascular disease or toxemia or who even has a seriously malformed child. As a result, each of us is apt to approach our next elderly primigravid woman with some degree of fear and trembling. If the labor is not consummated in an extremely short time by spontaneous delivery, we are impelled, by our fear of a possible adverse outcome, to undertake some form of operative delivery which in itself often carries more risk than the average moderately serious complication in younger women. It would be difficult to find a clinic anywhere in the country where the incidence of cesarean section is not much greater for the older primiparas than it is for the younger ones.

Data in any given series of "old primiparas," cared for in these circumstances by physicians who possess these fears, will naturally not compare favorably with the results in a series of younger women who are allowed to deliver spontaneously or with only minor interference. In the analysis of any such series, one should distinguish between the differences inherent in the patients and those induced by altered management.

There have appeared in the literature few analyses of the outcome of pregnancy and labor for elderly multigravidas. A few writers have treated the subject of the "grand multipara," but, since many multiparas are still rather young, the effect of aging on the multipara has not been accurately assessed. If the elderly multipara presents a problem, that fact is not generally recognized.

The present study includes the analysis of 5,186 consecutive cases in primiparas and 4,681 consecutive cases in multiparas. All the women, with few exceptions, were delivered under my direction. It should be said at this point that, while I have not feared the problem of the elderly primipara as much as many physicians, I have, of course, not been entirely immune to the belief that she is more likely to have trouble than her younger counterpart. The patients, both primiparas and multiparas, were divided into four age groups. In the case of the primiparas, the age groups were (1) up to 15, (2) 16 to 29, (3) 30 to 34 and (4) 35 and older. The age groups for the multiparas were (1) up to 29, (2) 30 to 34, (3) 35 to 39 and (4) 40 and older. The data for the primiparas and the multiparas have been analyzed to determine differences in the incidence of major

From the University of Kansas Medical Center.
Read before the Section on Obstetrics and Gynecology at the Ninety-Eighth Annual Session of the American Medical Association, Atlantic City, N. J., June 9, 1949.

complications and of abnormal presentations, the duration of the first and second stages of labor, the loss of blood in the third stage of labor, the number of cesarean sections and other operative procedures performed, the weight of the baby and the fetal mortality.

Tables 1 and 2 show that the incidence of some of the major complications was definitely increased in the older age groups, whereas aging seemed not to produce significant increases for other complications. For correct interpretation of these figures one must take into account the fact that a number of patients with complications are referred to a clinic such as that from which these figures come and that, therefore,

TABLE 1.—*Primigravidas with Major Complications*

	Age, Years							
	Under 16		16-29		30-34		35 and Over	
	No.	%	No.	%	No.	%	No.	%
Condition								
Late toxemias	13	7.6	282	6.0	26	9.5	7	5.9
Myoma	0	0	5	0.1	7	2.5	13	11.0
Placenta previa	1	0.6	20	0.4	4	1.4	1	0.9
Premature separation	0	0	23	0.5	2	0.7	0	0
Heart disease	0	0	16	0.3	2	0.7	4	3.4
Other conditions	0	0	16	0.3	5	1.5	2	1.7
Total patients with major complications	14	8.2	362	7.8	46	16.7	27	22.9
Total patients	170		4,622		275		118	

TABLE 2.—*Multigravidas with Major Complications*

	Age, Years							
	Under 30		30-34		35-39		40 and Over	
	No.	%	No.	%	No.	%	No.	%
Condition								
Toxemia	61	1.9	35	4.1	56	11.1	13	7.2
Placenta previa	38	1.2	17	1.9	13	2.6	8	4.4
Premature separation	25	0.8	9	1.5	11	2.2	5	2.7
Cardiovascular disease	25	0.8	7	0.8	17	3.4	9	5.0
Myoma	7	0.2	7	0.8	7	1.4	2	1.1
Other conditions	21	0.7	10	1.2	3*	0.6	0	0
Total patients with major complications	177	5.6	85	10.0	107	21.0	37	20.4
Total patients	3,142		854		504		181	

* Two of these patients had carcinoma.

the incidence of these complications in this series was much greater than one would observe in the strictly private practice of an individual physician or among the "booked" cases of a clinic. It is rather striking that hypertensive cardiovascular disease was greatly increased for both primiparas and multiparas in the older age groups in this series. Similarly, serious myomas of the uterus were a negligible complication in the younger women, whereas these tumors appeared frequently in the older groups. These and other diseases characteristic of the upper brackets of so-called middle life perforce have an increased incidence in the older groups and, of course, affect the outcome of the pregnancy and the labor in some cases. It is somewhat surprising that the incidence of late toxemia of pregnancy was no greater for the older primipara than for her younger sister.

Abnormal presentation (tables 3 and 4), if one includes breech presentation, was moderately increased for the

TABLE 3.—*Primigravidas Showing Abnormal Presentation*

	Age, Years			
	Under 15	16-29	30-34	35 and Over
Breech presentation	3	182	12	11
Other types				
Bregma	3	34	3	2
Brow	..	9	3	..
Face	..	8	1	..
Transverse	1	4	2	1
Total patients showing abnormal presentation	7 (4.1%)	237 (5.1%)	21 (7.6%)	14 (11.9%)
Total patients	170	4,622	275	118

TABLE 4.—*Multigravidas Showing Abnormal Presentation*

	Age, Years							
	Under 30		30-34		35-39		40 and Over	
	No.	%	No.	%	No.	%	No.	%
Breech presentation	101	3.2	35	4.1	26	5.1	8	4.4
Other types								
Bregma	25	...	7	...	1	...	1	...
Brow	9	...	5	...	2	...	..	...
Face	9	...	..	...	..	...	1	...
Transverse	15	0.5	13	1.5	6	1.2	5	2.8
Compound	1	...	..	...	..	...	..	...
Total patients showing abnormal presentation	162	5.1	55	6.4	35	6.9	15	8.3
Total patients	3,142		854		504		181	

TABLE 5.—*Incidence of Cesarean Section and Duration of First Stage of Labor for Primigravidas*

	Age, Years			
	Under 16	16-29	30-34	35 and Over
Patients with cesarean section	2 (1.3%)	65 (1.5%)	23* (8.7%)	11† (9.3%)
Patients with normal first stage of labor	167	4,269	251	107
Aver. duration, hr.	13.5	13.2	14.7	12.9
Total patients for whom data were compiled	170	4,622	275	118

* Fourteen of these patients had dystocia; 2, placenta previa; 2, heart disease; 2, toxemia; 2, myoma, and 1, diabetes.
† Four of these patients had dystocia; 1, placenta previa; 2, toxemia; 2, myoma, and 1, diabetes.

TABLE 6.—*Incidence of Cesarean Section and Duration of First Stage of Labor for Multigravidas*

	Age, Years			
	Under 30	30-34	35-39	40 and Over
Patients with cesarean section	68 (2.2%)	31 (3.6%)	27 (5.4%)	9 (5.0%)
Repeated	21	12	6	1
Due to placenta previa	7	5	3	2
Due to cardiovascular disease	..	..	2	3
Average duration of first stage of labor, hours	7.8	7.6	8.2	7.6
Total patients	3,142	854	504	181

older multiparas and greatly increased for the older primiparas. This did not seriously affect the outcome

for either mother or child and was, therefore, of more scientific than practical interest. It is, in fact, difficult to see how age per se could affect the type of presentation, and it seems doubtful to me whether a similar series would show a difference of this type.

Tables 5 and 6 have to do with the incidence of cesarean section and the duration of the first stage of labor for patients delivered through the vagina. The incidence of cesarean section for the older patients in both series was definitely greater. For the primiparas, in particular, this increase was due in no small part to the increased incidence of heart disease and fibroids; likewise, for the multiparas, heart disease played a large role. Another considerable number of the cesarean sections, which can definitely be ascribed to the fear that something might go wrong in the labor of the elderly primiparas, were, in my present opinion, unnecessary. In the case of the vast majority of the patients who were delivered through the vagina,

TABLE 7.—*Data on Second and Third Stages of Labor for Primigravidas*

	Age, Years			
	Under 16	16-29	30-34	35 and Over
Second stage				
Patients with spontaneous delivery	150	3,891	173	67
Average duration, min.	56	51	52	51
Patients with operative delivery	13 (9% of 170)	532 (12% of 4,623)	79 (31% of 275)	40 (37% of 118)
High forceps	..	1	..	..
Mid forceps	3	34	6	6
Low forceps	11	466	67	32
Version	1	21	5	1
Craniotomy	..	5	1	1
Average duration, min.	136	107	75	98
Blood loss in third stage, cc.				
Spontaneous delivery	177	186	209	210
Operative delivery	367	294	296	356
Total patients for whom data were compiled	170	4,623	275	118

the first stage of labor was no longer for the older patients of either group.

In tables 7 and 8, the second stage of labor may also be seen to have been no longer in the older age groups. One might well remark that if a woman is young enough to become pregnant, she is young enough to have her baby. In the cases in which it was thought necessary to undertake operative delivery, the decision was arrived at sooner, on the average, for the older age groups and might have been avoided in many instances if the patients had been given the same opportunity for spontaneous delivery as their younger sisters. While the amount of blood lost in the third stage was slightly greater for the older age groups in this series, the difference was not large and was in no way comparable to the increased loss associated with operative delivery, particularly when that operative delivery was undertaken early in the second stage, necessitating a more extensive procedure.

The weight of the baby (tables 9 and 10) was not appreciably increased for the older women and, therefore, was not a factor of clinical importance. The fetal mortality (tables 9 and 10) was definitely higher for the older women; this was particularly true of the neonatal mortality for the primiparas and of both the antepartum and the neonatal mortality for the multiparas. When the 2 examples of major developmental anomalies which happened to occur in this relatively small number of cases are excepted, the increased mortality appears largely due to increased operative interference, to the presence of fibroids and, although it is not indicated in these tables, to the

TABLE 8.—*Data on Second and Third Stages of Labor for Multigravidas*

	Age, Years			
	Under 30	30-34	35-39	40 and Over
Second stage				
Patient with spontaneous delivery	2,904	732	425	157
Average duration, min.	16	15	19	18
Patients with operative delivery	58 (1.9%)	34 (4.1%)	18 (3.9%)	8 (4.7%)
High forceps	2	..	..	..
Mid forceps	9	5	2	..
Low forceps	31	13	8	3
Version	15	16	7	5
Craniotomy	1	..	1	..
Average duration, min.	16	15	19	18
Blood loss in third stage, cc.	150	173	191	176
Total patients for whom data were compiled	3,142	854	504	181

TABLE 9.—*Data on Weight of Baby and Fetal Mortality for Primigravidas*

	Age, Years			
	Under 16	16-29	30-34	35 and Over
Average weight of baby, Gm.	3,085	3,153	3,168	3,149
Instances of fetal mortality				
Antepartum	2	38	7	3
Intrapartum	3	40	5	2
Neonatal	0	60	5	5
Total instances of fetal mortality	5 (2.9%)	138 (3.0%)	17* (6.2%)	10† (8.5%)
Total patients	170	4,623	275	118

* In 1 case, placenta previa was the cause of death; in 4, trauma; in 4, toxemia; in 1, diabetes, and in 3, premature birth; in 4 cases, the cause was unknown.

† In 1 case, anencephaly was the cause of death; in 1, hydrocephaly; in 1, syphilis; in 2, toxemia; in 2, myoma, and in 2, premature birth; in 1 case, the cause of death was unknown.

TABLE 10.—*Data on Weight of Baby and Fetal Mortality for Multigravidas*

	Age, Years			
	Under 30	30-34	35-39	40 and Over
Average weight of baby, Gm.	3,305	3,285	3,270	3,285
Instances of fetal mortality				
Antepartum	20 (0.9%)	12 (1.4%)	23 (4.6%)	9 (5.0%)
Intrapartum	17	12	12	4
Neonatal	33	22	14	7
Total instances of fetal mortality	90 (3.9%)	46 (5.4%)	49 (9.7%)	20 (11.0%)
Total patients	3,142	854	504	181

increased incidence of heart disease. Cesarean section is to be preferred to major vaginal operative procedures, particularly for dystocia due to unyielding soft parts. It is extremely difficult to arrive at a correct early decision in some of these cases.

SUMMARY AND CONCLUSIONS

The data for this relatively small series of patients demonstrate that older pregnant women, like other women of the same age but not pregnant, are more apt to have fibroids, hypertensive cardiovascular disease and, perhaps, carcinoma (indicated in the original data but not shown in the tables) than are younger women. They are, therefore, deserving of the most careful and complete examination of all their organs and functions. The analysis also seemed to show that labor and the results thereof, except for a possible extremely moderate increase in fetal mortality, can be expected to progress along the same lines as for the younger groups. Our present fear of the outcome of pregnancy for the elderly primigravida is no more justified than would be such a fear for the elderly multigravida. A small number of the older primiparas will be found to have serious complications, but so will a similar number of the older multiparas. Careful examination and accurate diagnosis are therefore necessary. If no major complications are present, one can approach the care of the older patient, primigravida or multigravida, with the same confidence one has in that of a younger patient.

ANESTHESIA FOR THE PARAPLEGIC PATIENT

COMDR. JAMES G. KURFEES
LIEUT. SCOTT WHITEHOUSE
and
LIEUT. FRANK CERZOSIMO
Medical Corps, United States Navy

During World War I approximately 80 per cent of the men who received injuries of the spinal cord died within the first few weeks as a result of urinary infections and decubitus ulcers.[1] Today through more effective means of counteracting shock, rapid evacuation of the wounded and the almost miraculous effects of the sulfonamide drugs and antibiotics, large numbers of patients who sustained injuries of the spinal cord are living and are being rehabilitated for a useful life in their community.

MATERIAL

Since January 1945 we have had the opportunity to observe a series of 49 cases in which injuries of the spinal cord resulted in either complete or partial paralysis of the lower extremities with varying degrees of dysfunction of bladder and bowel.

The cervical region was involved in 14 cases, the thoracic in 30 and the lumbar in 5 (table 1). The total number of surgical operations performed in these 49 cases was one hundred and sixty-seven, as classified in table 2. Of these operations, twenty-five did not require anesthesia of the patient because the operative site was well below the level of the lesion.

PREOPERATIVE PREPARATION

The paraplegic patient presents many problems to the physician, but two are of the utmost importance to the anesthesiologist: First, many paraplegic persons are in a state of malnutrition with low hemoglobin and plasma protein levels. Patients with plasma proteins below 6 to 8 Gm. per hundred cubic centimeters or hemoglobin below 80 per cent had transfusions of whole blood. Unless positive nitrogen balance is maintained, wound healing is retarded and resistance to infection is decreased. Second, after the occurrence of an injury to the spinal cord there is an immediate change in the state of a person from independence to almost complete dependence on others for transportation, nourishment and disposal of excreta. Depression even with thought of suicide is not uncommon. Because of his physical dependence on others, the paraplegic person becomes less mature emotionally as shown by irritability, fits of anger and depression.

Since these patients show pronounced emotional instability, it is of the utmost importance that the anesthetist gain their confidence. This is accomplished during preoperative rounds, when the purpose and methods of the anesthesia are discussed with the patient and an attempt is made to evaluate his emotional status.

The paraplegic patient in our experience has a low threshold for pain, and, because many of them have received analgesics for considerable periods of time, larger doses of depressant drugs are required for premedication.

CHOICE OF ANESTHESIA

A review of the current literature revealed little information regarding the choice of anesthetic agent for the paraplegic patient. Donald Munro of Boston City Hospital has expressed his preference for intravenous thiopental sodium (pentothal sodium®) on a tribromoethanol (avertin®) base as an anesthetic.[2] Croce and Beakes[3] reported on the operative treatment of decubitus ulcers in 130 paraplegic patients treated at the Halloran General Hospital. Most patients did not require an anesthetic at the time of operation, since the ulcer occurred below the sensory level. When anesthesia was required, endotracheal administration of ether was used almost exclusively, because it was considered safest with the patient in the prone position. Spinal anesthesia was seldom employed.

In our series of cases we have given the patients ether and thiopental sodium in varied technics as shown in table 2. Endotracheal administration was the method used, whenever indicated (as in the sitting, prone or lateral position), to insure a patent airway. Several of the patients were in cervical traction, and in these intubation was done with topical cocainization before general anesthesia was induced.

It is our belief that in qualified hands any agent can be administered to paraplegic persons with any suitable technic if such fundamental physiologic and pharmacologic principles as adequate fluid therapy, oxygenation and maintenance of blood pressure are observed.

Our consultants, Drs. Lewis H. Wright, Emanuel Feldman and Norman L. Cook, assisted in the preparation of this article.

Read before the Section on Anesthesiology at the Ninety-Eighth Annual Session of the American Medical Association, Atlantic City, N. J., June 9, 1949.

The opinions or assertions contained herein are the private ones of the authors and are not to be construed as official or reflecting the views of the Navy Department or the naval service at large.

1. Kennedy, R. H.: The New Viewpoint Toward Spinal Cord Injuries, Ann. Surg. 124: 1057-1065, 1946.

2. Munro, D.: The Rehabilitation of Patients Totally Paralyzed Below the Waist, with Special Reference to Making Them Ambulatory and Capable of Earning Their Living: I. Anterior Rhizotomy for Spastic Paralysis, New England J. Med. 233: 453-461, 1945.

3. Croce and Beakes: Operative Treatment of Decubitus Ulcer, New England J. Med. 237: 141-149, 1947.

MANAGEMENT DURING OPERATIVE INTERVENTION

The problem of adequate respiratory exchange and the position required during surgical intervention concerns the anesthesiologist more in the paraplegic patient than in many other types of patients. In injuries of the thoracic and cervical parts of the spine, paralysis of the intercostal muscles places the full burden of respiratory exchange on the diaphragm. Often hemopneumothorax is a complication of thoracic spine and rib injuries, and its displacement of available pulmonary area also reduces respiratory exchange. Changes in position in such cases may cause mediastinal shifts with all the attendant reflex physiologic emergencies.

Increase in abdominal pressure in the paraplegic patient can encroach on what little efficiency there remains in diaphragmatic breathing and thereby increase any degree of anoxia that may already exist.

With this problem in mind one must protect the respiratory efforts that are present and assist them as needed. In prone positions the patient is supported by rolled sheets extending bilaterally from the clavicle to the anterosuperior part of the spine. This permits minimal interference with respiratory exchange. In sitting positions for cervical laminectomies, careful positioning is important to obviate any interference with diaphragmatic activity. Well padded arm supports are used to maintain this position and to prevent any weight bearing by muscles of the shoulder girdle.

TABLE 1.—*Statistical Summary of Injuries to the Spinal Cord*

Site of Lesion	
Cervical (C 5 to C 7)	14
Upper thoracic (T 1 to T 6)	13
Lower thoracic (T 7 to L 1)	17
Lumbar (L 1 to L 5)	5
Total	49
Etiology of Injury	
Shell fragments	7
Bullets	10
Fracture of the vertebra	30
Rupture of the anterior spinal artery	2
Total	49

The presence in the paraplegic patient of an abnormal cutaneous vascular reflex renders the skin over weight-bearing bony points, especially over the sacrum, ischia and trochanters, particularly susceptible to pressure ischemia and necrosis. Experience has shown that continued weight bearing cannot be extended beyond two hours at a time without risk of producing pressure necrosis, which inevitably leads to ulcers with all the attendant difficulties of hypoproteinemia, infection, toxicity and anemia.[4] Special attention must be given by the anesthetist to the paraplegic patient to insure careful padding and positioning of the weight-bearing bony points.

Because of the high incidence of renal calculi, fluid replacement during surgical procedures should be adequate to maintain renal function and prevent stasis. The position of paraplegic persons who have indwelling catheters connected to rubber bladder bags strapped to an extremity must be arranged so that no pressure or weight will be applied to that bag, since back pressure will distend the patient's bladder, resulting in postoperative discomfort for several hours.

TABLE 2.—*Type of Anesthesia in 167 Operations on Paraplegic Patients*

Type of Operation	No. of Cases	Type of Anesthesia: Ether Endotracheal Absorption	Ether Absorption	Thiopental Sodium Plus N_2O and O_2	Thiopental Sodium Drip	Thiopental Sodium Plus O_2	None
Laminectomies							
Cervical	9	9	..	..	..	..	..
Thoracic	33	28	3	2	..	..	..
Lumbar	2	1	..	1	..	..	..
Genitourinary							
Suprapubic cystotomy	14	..	..	12	..	2	..
Nephrostomy	6	5	1	..	..	..	..
Nephrectomy	3	3	..	..	..	..	..
Pyelotomy	3	2	1	..	..	..	..
Pyelolithotomy	1	1	..	..	..	..	..
Litholapaxy	1	..	..	1	..	..	..
Ureterotomy	4	1	..	3	..	..	..
Perlurethral abscess *	3	..	..	3	..	..	..
Cystoscopy	8	..	..	7	..	1	..
Abdominal							
Exploratory Laparotomy	2	..	2	..	..	..	..
Jejunostomy	1	..	1	..	..	..	..
Colostomy	4	..	..	3	1	..	..
Resection of the terminal ileum	1	..	1	..	..	..	..
Neural							
Median nerve repair	1	..	..	1	..	..	..
Ulnar nerve repair	1	..	..	1	..	..	..
Neurolysis of right brachial plexus	1	..	..	1	..	..	..
Obturator nerve crush	2	..	..	2	..	..	..
Spinal Fusions							
Cervical	1	1	..	..	..	..	..
Thoracic	2	2	..	..	..	..	..
Plastic repair of decubitus ulcers	29	1	..	..	5	..	23
Rhizotomy	7	5	..	2	..	..	..
Cordotomy	3	..	..	3	..	..	..
Amputation at midthigh	3	..	..	2	1	..	..
Sequestrectomy of ischium	14	..	..	5	6	1	2
Lengthening of wrist tendons	1	..	..	1	..	..	..
Osteotomy of dorsal spines	1	1	..	..	..	..	..
Change of dressing	2	..	..	..	..	2	..
Sinus exploration of abdomen and back	2	..	..	2	..	..	..
Bilateral mastectomy	1	..	1	..	..	..	..
Lung abscess *	1	1	..	..	..	..	..
Total	167	61	10	52	13	6	25

* Incision and drainage.

In regard to blood pressure, pulse and respiratory patterns of paraplegic patients, our series did not reveal any unusual features.

4. Munro, D.: The Care of Patients Paralyzed as the Result of Injury to the Spinal Cord and Cauda Equina, M. Clin. North America 32:1273-1291, 1948.

POSTOPERATIVE MANAGEMENT

The paraplegic patient with cervical or thoracic involvement has an impairment of respiratory exchange and an inability to cough forcibly. With this in mind it must be made certain postoperatively that careful and thorough tracheobronchial aspiration is performed and adequate pulmonary exchange is present in both lung fields. Ward personnel who are well trained in postoperative care pertaining to preservation of the airway, adequate aspirations, adjustment of position and recognition of impending shock during the recovery period must be available.

COMPLICATIONS

Anesthetic Complications.—Other than 1 case of atelectasis in which the patient made an uneventful recovery, there were no anesthetic complications.

Operative Complications.—There was 1 case of meningismus subsequent to a thoracic laminectomy. During a nephrolithotomy the diaphragm was inadvertently injured, resulting in pneumothorax. In 1 patient there developed postoperative surgical shock.

SUMMARY AND CONCLUSION

A study is presented of problems of anesthesia in one hundred and sixty-seven surgical operations performed on 49 paraplegic patients.

The particular problems of management presented by the paraplegic patient preoperatively, during surgical intervention and postoperatively are discussed.

It is concluded from our clinical observations that paraplegic patients present no insurmountable problems in anesthesia, provided the usual basic fundamental principles of anesthesia are observed, namely, adequate oxygenation, sufficient fluid replacement therapy and maintenance of circulation.

ABSTRACT OF DISCUSSION

Dr. Lewis H. Wright, Great Neck, N. Y.: The authors have emphasized the main problems involved in the care of these patients—psychologic, nutritional and peculiar reactions to painful stimuli. Now that the physician is more familiar with the care of paraplegic persons their life expectancy is greatly increased and several thousands of them are leading more or less normal lives. Paraplegic patients present frequent surgical problems. They are especially prone to the development of urinary calculi; therefore they repeatedly need relief of pain. Every anesthesiologist should be familiar with the particular problems involved in anesthesia for these patients. This paper stresses the importance of obeying the fundamental psychologic, physiologic and pharmacologic principles of surgery and anesthesia. This can be repeated again and again. Each patient must be thoroughly studied, and the anesthetic procedure that best fits his particular needs must be adopted. The nutritional needs of the patient must be considered from the point of view not only of the surgical procedure but of the variable effects of anesthetic drugs on patients in a state of malnutrition; for example, anesthetic drugs affect patients with hypoproteinemia more adversely than they do normal patients. In these patients I have used: ether; cyclopropane; nitrous oxide, thiopental sodium and oxygen; nitrous oxide and thiopental sodium; oxygen and curare combinations; spinal anesthesia, and, of course, local anesthesia, with appropriate technic. In any given case, any agent or technic properly chosen may be used satisfactorily, with the results one would expect provided the fundamental principles of anesthesia are obeyed. One cannot repeat too often that the user, not the procedure, is more vital.

Dr. Dwight D. Grove, Philadelphia: The following general principles should be applied to the anesthetic management of the paraplegic subject. 1. Preoperative preparation should be as thorough and complete as possible. The physical status of the patient should be improved to the best degree attainable before surgical treatment is instituted. Comprehensive laboratory, roentgen ray, clinical and physical observations should be used as a guide for preparation of the paraplegic patient for surgical intervention. 2. The choice of anesthetics should be confined to those agents and technics with which the anesthesiologist is thoroughly familiar. New agents and technic should not be tried on these handicapped and subnormal risk patients. 3. The anesthetic agent and method should be selected only after careful consideration of all factors involved. Agents and methods available are varied and numerous, an indication that no one ideal method has been developed. From these should be selected the agent and method most suitable for a particular patient, the surgeon and the anesthesiologist assigned to the case. 4. Every attempt should be made to prevent complications before, during and after surgical intervention. Frequent change of position, breathing exercises, maintenance of muscle tone, tracheobronchial aspiration by catheter or bronchoscope and the use of antibiotics come under this general principle. 5. Because of the psyche, I believe that these patients should have general anesthesia to prevent any further possible psychic trauma. It is advisable, where possible, to produce unconsciousness with rectal or intravenous agents before the patients are removed from their beds and taken to the surgical amphitheater. The choice of anesthesia for the paraplegic patient will usually be found among the following agents and methods: 1. Intravenous thiopental sodium supplemented with nitrous oxide and oxygen for surgical procedures in the supine position which do not require relaxation. 2. Endotracheal ether and oxygen for intra-abdominal surgical measures, operations on the head and neck, intrathoracic procedures, and surgical treatment with the patient in the lateral and prone position. Cyclopropane and oxygen, with or without the addition of ether, is an equally good choice if contraindications to cyclopropane do not exist before or during anesthesia. Small amounts of thiopental sodium may be used for the induction of anesthesia. 3. Tribromoethanol solution, rectally, supplemented with endotracheal nitrous oxide and oxygen where the use of electrical equipment precludes the use of a flammable anesthetic. However, nitrous oxide, chloroform, spinal and regional anesthesia and the use of curare do not hold desirable positions in the problem of the selection of anesthesia for the paraplegic patient.

The Transport Surgeon.—This is one of the most responsible assignments given to any Army medical officer of comparable age, rank and experience. As the only physician on a floating Army post, often 1,000 miles from the nearest land, he must assume responsibility for the sanitation of the ship and render emergency veterinary, dental and medical service. The passengers and crew may include 2,000 persons. In addition, he commands a staff of about 15 persons, including nurses, enlisted technicians and, occasionally, WAC personnel. He is commander of a 50 bed hospital, which includes about 15 cribs. This hospital is administratively considered to be a station hospital, and the transport surgeon must maintain all the usual records required for such an installation. He must act as his own medical supply officer and medical administrative officer. He also performs a staff function for the transport commander and acts as an accredited representative of the Public Health Service, Quarantine Section. In compensation for this tremendous work load, the facilities at the transport surgeon's disposal are a medical man's dream. About seven tons of medical supplies encompassing 900 items are placed aboard each vessel, including a 30 ma. portable radiographic unit with full darkroom facilities, modern operating room equipment and a complete medical library.—Captain Thomas G. Kantor, Medical Corps, Army of the United States, Army Transport Medical Service, *Bulletin of the U. S. Army Medical Department*, October 1949.

PREOPERATIVE AND POSTOPERATIVE CARE

FREDERICK A. COLLER, M.D.
and
MARION S. DeWEESE, M.D.
Ann Arbor, Mich.

To prepare a healthy patient for operation and to guide him through a speedy and successful convalescence is usually not difficult. However, when disease has caused important abnormal physiologic changes and when the necessary operative procedures are long and traumatic, the difference between a successful outcome and a failure will lie in the skill with which the patient is supervised before, during and after operation. The human body has remarkable powers of adaptation when all its systems are functioning, and it has rich reserves with which to compensate for deficiencies produced by disease and treatment. Many mistakes made in the past were those of well intentioned but unreasoned therapy such as enforced bed rest, excessive drugging and overzealous parenteral feeding.

EVALUATION OF THE PATIENT

The preoperative preparation of the patient begins at the moment of the initial examination. It consists of an accurate evaluation of the physical and mental status and the initiation of a plan for correction of existent pathologic conditions.

Most significant organic abnormalities will be brought to light during the course of a preliminary study of the patient consisting of a careful history, physical examination and the necessary laboratory studies.

Age no longer has an important influence on the decision of a physician to carry out definitive surgical measures. Both the extremely young and the extremely old tolerate major operative procedures well if adequately prepared and understandingly managed. The cardiovascular status must be carefully evaluated, but the presence of organic heart disease, except in the patient with severe hypertension, should not deter physicians from proceeding with necessary operative procedures. Similarly, other chronic organic diseases need not constitute a contraindication to surgical measures if their presence is known. The patient with poor renal function may pose special problems in water and electrolyte balance, but if albuminuria, a persistently low specific gravity of the urine or an increase in the amount of nonprotein nitrogen is noted preoperatively, these problems may be anticipated and more easily solved.

NUTRITIONAL PREPARATION

The nutritional status of the patient who is chronically ill has been the subject of careful study. The importance of various nutritional deficiencies has been emphasized, but it is well to keep in mind that in the malnutrition of chronic illness the body suffers from a deficiency of all food elements. History and evidences of recent involuntary loss of weight are the best clinical manifestations of a deficiency in the diet. Plasma protein determinations may in certain instances be of aid, but they do not always reflect the true nutritional state of the patient.

The potential deleterious effects of malnutrition on surgical convalescence are many. The dangers of hypoproteinemia have been emphasized, but it is well to remember that this is only one manifestation of generalized malnutrition. These dangers include a lag in wound healing and increased incidence of wound dehiscence,[1] a predisposition to the development of decubitus ulcers [2] and increased susceptibility to shock.[3] Delay in gastric emptying time [4] and retarded intestinal motility [5] develop. Increased susceptibility to infectious diseases results because of a deficient production of antibodies.[6]

The nutritional preparation of the patient is best carried out by the normal oral route whenever possible, utilizing diets sufficient in all food elements. This frequently taxes the ingenuity of both the physician and the dietitian. In a difficult feeding problem the daily intake, especially the protein and caloric components, should not be left to chance but should be accurately determined and recorded. Protein hydrolysates are easily assimilated by the patient who is chronically ill, and when necessary they may be advantageously used to supplement normal diets. Varco [7] has recently provided an excellent summary of preoperative dietary management in the chronically ill patient and has suggested helpful methods for use in difficult feeding problems.

Patients with a high degree of esophageal or pyloric obstruction cannot be adequately prepared nutritionally by the oral route. The results of feedings by gastrostomy have been disappointing. Feedings by jejunostomy have had limited usefulness, largely because most of the formulas previously employed have caused severe diarrhea. The use of homogenized milk formulas may help to overcome this difficulty.[8]

Elman [9] first demonstrated in 1939 that treatment with parenterally administered protein can be successful in man. Since that time, this method of administering protein to the ill patient has enjoyed an everwidening popularity. In our experience parenterally administered protein has an extremely limited field of usefulness, but it is helpful in the preparation of those severely malnourished patients who cannot take adequate diets in other ways. Kremen [10] has recently shown that malnourished patients who are poor operative risks can be adequately prepared for operations of major magnitude by parenteral means alone if 3,000 cc. protein hydrolysate (amigen®) and 500 cc. whole blood are given daily.

Whipple [11] demonstrated that much of the protein given to the chronically ill, anemic patient is diverted to hemoglobin production. If protein supplies are limited, hematopoiesis enjoys top priority and may draw on other tissues to meet its protein requirements.

From the Department of Surgery, University of Michigan Medical School.

Read in the General Scientific Meeting at the Ninety-Eighth Annual Session of the American Medical Association, Atlantic City, N. J., June 7, 1949.

1. Thompson, W. D.; Ravdin, I. S., and Frank, I. L.: Effect of Hypoproteinemia on Wound Disruption, Arch. Surg. **36**: 500 (March) 1938.

2. Mulholland, J. H.; Co Tui; Wright, A. M., and Vinci, V. J.: Nitrogen Metabolism, Caloric Intake and Weight Loss in Postoperative Convalescence, Ann. Surg. **117**: 512, 1943.

3. Elman, R.: Acute Protein Deficiency (Hypoproteinemia) in Surgical Shock, J. A. M. A. **120**: 1176 (Dec. 12) 1942.

4. Meeray, P. M.; Barden, R. P., and Ravdin, I. S.: Nutritional Edema: Its Effects on the Gastric Emptying Time Before and After Gastric Operations, Surgery **3**: 53, 1938.

5. Barden, R. P.; Ravdin, I. S., and Frazier, W. D.: Hypoproteinemia as a Factor in the Retardation of Gastric Emptying After Operations of the Billroth I or II Types, Am. J. Roentgenol. **38**: 196, 1937.

6. Cannon, P. R.; Chase, W. E., and Winsler, R. W.: The Relationship of the Protein Reserves to Antibody Production, J. Immunol. **47**: 133, 1943.

7. Varco, R. L.: Preoperative Dietary Management for Surgical Patients, Surgery **19**: 203, 1946.

8. Case, C. T.; Zollinger, R. M.; McMullen, C. N., and Brown, J. B.: Observations in Jejunal Alimentation, Surgery **26**: 364, 1949.

9. Elman, R., and Weiner, D. O.: Intravenous Alimentations, J. A. M. A., **112**: 796 (March 4) 1939.

10. Kremen, A. J.: The Problem of Parenteral Nitrogen Administration in Surgical Patients, Surgery **23**: 192, 1948.

11. Whipple, G. H.: Hemoglobin and Plasma Proteins: Their Production, Utilization and Interrelation, Am. J. M. Sc. **203**: 477, 1942.

The rational preoperative program must include transfusions of whole blood first and adequate protein and caloric intake later, whether it be by the preferable oral route or of necessity by other routes.

Certain of the vitamins are of importance in the preoperative preparation of the surgical patient. Ascorbic acid (vitamin C) is essential in the healing of wounds and should be supplied in amounts as high as 1 Gm. daily. Several of the B complex vitamins, notably thiamine hydrochloride (10 mg. daily), riboflavin (2 mg.) and nicotinic acid (50 mg. daily) aid in the metabolism of carbohydrates. The utilization of parenterally administered dextrose especially demands these vitamins. Riboflavin also aids in the utilization of certain of the amino acids.[12]

Vitamin K, a precursor of prothrombin, is urgently required by patients with hepatic insufficiency or lesions of the gastrointestinal tract producing obstructive jaundice, diarrhea or persistent vomiting. The prothrombin concentrations of all patients with significant gastrointestinal lesions requiring surgical intervention should be determined preoperatively. Severe operative hemorrhage may result if an existent prothrombin deficiency is not corrected. Hypoprothrombinemia caused by the inhibition of bacteria which normally synthesize vitamin K within the gastrointestinal tract has also been noted in patients receiving orally administered phthalylsulfathiazole (sulfathalidine®)[13] or streptomycin.[14] Patients receiving intestinal antiseptics should be given supplementary amounts of vitamin K.

The more nearly a normal diet can be approximated, the better will be the response. This should be the guiding rule in all preoperative nutritional therapy.

CORRECTION OF ANEMIA AND DECREASED VOLUME OF BLOOD

The anemic patient has long been known to tolerate surgical intervention poorly. A normal hemoglobin level is essential for maintenance of adequate oxygenation during anesthesia and after operation. Elective operative measures should never be undertaken until the anemia of the patient has been corrected.

Clark and his co-workers[15] have introduced the concept of chronic shock to explain the poor tolerance of chronically ill patients to operative procedures. The essential elements of this syndrome are loss of weight, decreased volume of blood, decrease of proteins in the blood and an increased volume of interstitial fluid. The entire picture, including the decreased volume of blood, is a result of starvation and is postulated as being due primarily to a deficiency of circulatory red blood cell mass and hemoglobin without consistent depletion of the tissue protein reservoirs. In the absence of bleeding correction of this deficit is quantitative, based on the patient's usual or ideal weight prior to illness. Repeated transfusions restore the blood volume to normal without producing significant hemoconcentration and increase the tolerance of the patient who is a poor risk for major surgical procedures.

Although certain aspects of this concept have not been universally accepted, it has been recognized that chronically ill patients do tolerate operative intervention better after they have received multiple transfusions of blood.

CORRECTION OF DEHYDRATION AND CHEMICAL IMBALANCE

Dehydration may be caused by simple limitation of fluid intake, especially in the patient who is chronically ill, by abnormal losses from the gastrointestinal tract or elsewhere or by various combinations of both. Compensatory shifts in the extracellular fluid develop, and disturbances in electrolyte balance result. Diagnosis is made predominately on the basis of the clinical picture.[16] In dehydration due to abnormal losses of both sodium chloride and water this consists of apathy, weakness, somnolence, anorexia, brief periods of nausea, reduced affective responses, transient vertigo, a soft pulse and a slightly sticky skin. If the dehydration is severer, unproductive retching, syncope on attempting to stand, lowered blood pressure, tachycardia, subnormal temperature and soft eyeballs may be manifested.

Laboratory aids, including plasma chloride determination, are not always accurate in determining the extent and severity of dehydration. It has been noted, however, that clinical signs of dehydration are not usually manifested until a fluid loss comparable to 6 per cent of the body weight has been reached, and this may be of aid in determining the initial volume of fluid necessary to correct dehydration.[17]

Dehydration is frequently accompanied by disturbances of acid-base equilibrium. The amount and character of abnormal losses determine whether acidosis or alkalosis develops.

Treatment of dehydration consists of the administration of appropriate volumes of Ringer's solution and/or 5 per cent dextrose in water. Sodium chloride solutions alone correct the simple alkalosis of pyloric obstruction. Treatment of acidosis may necessitate the utilization of solutions of sodium lactate as well or, in the presence of hepatic insufficiency, of sodium bicarbonate. Dosages must be judged by clinical response; fixed formulas have proved inaccurate.[18] The daily total volume and specific gravity of the urine best reflect the water needs. In the presence of normal renal funtion and adequate urinary output (1,000 to 1,500 cc.), the determination of urinary chlorides provides an index of further sodium chloride requirements.[19] These chemical abnormalities require immediate correction, which should be accomplished before operative treatment is undertaken.

PREPARATION OF THE GASTROINTESTINAL TRACT

Proper preparation of the bowel is one of the most important adjuncts to successful gastrointestinal surgery. A few days spent in assuring optimum preparation is more than compensated by the smooth convalescence which it assures.

Intestinal obstruction, when it exists, is perhaps the greatest difficulty to be overcome, and the principles of decompression should be thoroughly understood and applied. No definitive operation should be carried out by election until decompression has been effected.

12. Ravdin, I. S.: Zintel, H. A., and Bender, D. H.: Adjuvants to Surgical Therapy in Large Bowel Malignancy, Ann. Surg. **126**: 439, 1947.

13. Wright, L. T.; Cole, F. R., and Hill, L. M.: The Effect of Sulfathaladine on the Bleeding and Clotting Time of the Blood and Prolongation Reduction by the Administration of Vitamin K, Surg., Gynec. & Obst. **88**: 201, 1949.

14. Herfort, R. A., and Standard, S.: Oral Streptomycin in Surgery of the Large Bowel, Ann. Surg. **128**: 987, 1948.

15. Clark, J. H.; Nelson, W.; Lyons, C.; Mayerson, H. S., and DeCamp, P.: Chronic Shock: The Problem of Reduced Blood Volume in the Chronically Ill Patient, Ann. Surg. **125**: 618, 1947.

16. Moyer, C. A.: Fluid and Electrolyte Balance, Surg., Gynec. & Obst. **84**: 586, 1947.

17. Coller, F. A., and Maddock, W. G.: A Study of Dehydration in Humans, Ann. Surg. **102**: 947, 1935.

18. Coller, F. A.; Ish, L. V.; Vaughan, H. H.; Kahler, N. B., and Moyer, C. A.: Translocation of Fluid Produced by the Intravenous Administration of Isotonic Salt Solutions in Man Postoperatively, Ann. Surg. **122**: 663, 1945.

19. Van Slyke, K. K., and Evans, I. E.: The Significance of Urine Chloride Determination in the Detection and Treatment of Dehydration with Salt Depletion, Ann. Surg. **128**: 391, 1948.

In general, pyloric obstructions and obstructions of the upper part of the small intestine are best managed by gastroduodenal (Wangensteen) suction. The Miller-Abbott tube, or its modifications, has its greatest application in the management of obstructions of the small intestine without vascular embarrassment. It does not provide adequate decompression for the obstructed colon, nor have we found it necessary as a supplementary measure in resections of the nonobstructed colon.

To proceed with definitive resection of the colon in the face of obstruction is a certain invitation to disaster. A decompressive cecostomy relieves the distention and edema of the bowel sufficiently to permit the reestablishment of bowel movements and adequate preparation. In those few patients who have virtually complete obstruction of the descending colon a proximal colostomy, preferably in the transverse colon, may be necessary. This must be performed as an emergency procedure in the event of perforation of the colon with spreading peritonitis and is an urgent necessity when there is a severe inflammatory process secondary to a slow perforation of a neoplasm or diverticulum. Satisfactory diversion of the fecal stream in these instances is necessary and is not afforded by cecostomy. After an appropriate period of adjustment the definitive surgical procedure can be safely performed.

Parenterally administered fluids and antibiotics are supplementary adjuncts of proved value and should be utilized in the management of intestinal obstruction.

The intestinal antiseptics, succinylsulfathiazole, phthalylsulfathiazole and more recently phthalylsulfacetimide (thalamyd), are a definite aid in the preparation of the colon. The position of orally administered streptomycin, although it is effective in reducing the bacterial flora within the colon, is at present debatable.[20] If the drug is used it should not be administered for longer than forty-eight to seventy-two hours preoperatively, as it rapidly loses its efficiency after this period of time.

We have discontinued the routine use of saline cathartics and enemas in the preparation of patients for surgical intervention, those with colonic lesions included. These measures are usually unnecessary and often add to the discomfort, dehydration and electrolytic disturbances of the patient. Succinylsulfathiazole and to a lesser extent phthalylsulfathiazole have a mild cathartic action and in most instances will induce several soft stools a day, which is adequate. Occasionally, a patient may be persistently constipated and may require mild saline catharsis during the last day or two of preparation.

AMBULATION AND MENTAL PREPARATION

In addition to these specific preoperative measures there are others of a more general nature which are of equal value. Ambulation is as important preoperatively as it is postoperatively. Every patient should be encouraged to continue his normal way of life to the time of operation.

The psychiatric components of such organic diseases as chronic ulcerative colitis and peptic ulcer have been thoroughly investigated. Competent psychiatric consultation is of great help in managing patients with these diseases. Many physicians tend to lose sight, however, of the great complexity of emotions with which the average patient approaches a surgical procedure, no matter how trivial. A few moments devoted to a sympathetic discussion of the patient's disease, the anesthetic, operation, anticipated postoperative course and cost will help him approach the operation much better prepared emotionally. The beneficial results may not be measurable objectively, but they are nevertheless real and important.

OPERATIVE PERIOD

In any discussion of preoperative and postoperative care certain aspects of the operative period itself cannot be completely ignored. Aside from the purely technical features of the operation, many important adjuncts to successful postoperative care may be established at this time. Not the least important of these is the choice and administration of anesthetic agents, which is discussed elsewhere.

Replacement of Blood Loss and Parenteral Administration of Fluids.—The replacement of blood simultaneously with its loss during an operation is of considerable importance. Unless measured objectively, blood loss is in most instances of greater magnitude than estimated. There are no laboratory tests suitable for routine clinical use in the postoperative patient which give an accurate estimate of the volume of blood lost during operation. Ideally, it is best calculated directly by gravimetric or colorimetric methods. As this is not often practicable, tables have been prepared of the approximate average loss of blood in various operations.[21] This will vary considerably among surgeons and among patients, but every surgeon should be familiar with the approximate loss of blood of his own patients in those operations which he performs frequently. The blood lost should then be replaced in accordance with the demands of each individual case. Replacement of blood has the twofold advantage for the patient of averting serious shock during operative intervention and of aiding convalescence.

It has been demonstrated experimentally that blood transfusions given several hours prior to sublethal hemorrhage in normal animals do little to protect the animal from the effects of hemorrhage.[22] It is thus evident that the blood volume cannot effectively be raised above normal levels preoperatively as prophylaxis against subsequent hemorrhage and that blood is most effectively replaced at the time of its loss.

Fluids should be administered carefully by the parenteral route during the course of the operation. In the operative and immediate postoperative periods there is suppression of renal function, with retention of sodium in the extracellular compartment. Excess amounts of sodium chloride and water given at this time promote the development of edema. Water is best supplied in a 5 per cent solution of dextrose, and volumes greater than 1,000 cc. are seldom necessary. Sodium chloride solutions should not be given.

Surgical Technic.—Careful technic, gentle handling of tissues, painstaking hemostasis, sharp anatomic dissection and accurate reconstruction contribute immeasurably to postoperative comfort of the patient and ease of convalescence. Within reasonable limits operative time is of secondary importance to operative care. Although a high premium is often placed on speed in an effort to utilize fully limited operating time and

20. Lockwood, J. S.; Young, A. D.; Bouchelle, M.; Bryant, T. R., and Stojowski, A. J.: Appraisal of Oral Streptomycin as an Intestinal Antiseptic with Observations of Rapid Development of Resistance of E. Coli to Streptomycin, Ann. Surg. 130:14, 1949.

21. Coller, F. A.; Crook, C. E., and Ish, L. V.: Blood Loss in Surgical Operations, J. A. M. A. 126:1 (Sept. 2) 1944.

22. Seevers, R., and Price, P. B.: Effects of Sublethal Hemorrhage in Normal Dogs and in Dogs Previously Transfused with Whole Blood, Surg., Gynec. & Obst. 88:178, 1949.

space, minutes saved in the operating room may well prolong the patient's convalescence by days. There should be no question as to which is economically sounder.

POSTOPERATIVE CARE

Postoperative care begins the moment the last suture is placed in the wound and ends when the patient returns to a normal mode of life. It consists primarily of those measures which will aid the patient in an early return to his normal physiologic status and which will aid the surgeon in the anticipation, prevention and treatment of postoperative complications. No facet of surgical practice requires more diligence, attention to detail, accuracy of observation and promptness of action once a trend is manifested, and there are no results more gratifying.

Ambulation.—Early ambulation has had an important influence on surgical convalescence. Although initially advocated by Ries [23] in 1899 and practiced extensively in Europe in the late twenties, it did not gain widespread recognition in this country until Leithauser and Bergo [24] renewed interest in it in 1941. Since that time many observations have supported its beneficial effects.

Simple confinement to bed has been shown to induce a negative nitrogen balance and to have a deleterious effect on the appetite. Conversely, early ambulation has a distinct protein-sparing action and reduces the severity and duration of postoperative asthenia. The vital capacity of the lungs returns to normal more rapidly and the tensile strength of wounds is not impaired.

Clinically, the incidence of postoperative complications, especially pulmonary, is reduced after early rising. Less nursing care is necessary, and patients do not require as much sedation. Most important, both the physical and emotional convalescence are appreciably shortened, and a shorter stay in the hospital is necessary.

Our experience with early ambulation has been completely favorable, and undue complications have not resulted. Patients are urged to get out of bed within twenty-four hours after operation and are aided in walking about the room. They are made to walk at least twice daily after that and are permitted complete freedom of ambulation as soon as it is tolerated. The only real contraindications to early ambulation are severe illness and confining apparatus. If patients are able to walk before operation, they are able to walk after it.

Fluid Requirements: Blood.—Water and electrolyte requirements in the immediate postoperative period are minimal. Renal function is usually extremely depressed during the first 12 to 48 hours after a serious operation; the selective excretion of electrolytes is temporarily disturbed, and sodium chloride and water are retained within the extracellular spaces.[25] During this period low urinary output is the rule, the extent of oliguria being in direct proportion to the severity of the operative measure and not related to the volume of fluid administered. Administration of sodium chloride at this time is unnecessary and only places a harmful burden on the depressed kidneys. On the day of operation intravenously given fluids should be limited to blood in sufficient quantity to replace that lost and a volume of 5 per cent dextrose in water sufficient to replace insensible water loss (approximately 1,500 cc.).[26]

Fluid and electrolyte requirements during the remainder of convalescence are dependent on the patient's progress and are determined only after careful clinical appraisal. In general, sufficient water should be administered to replace the insensible loss and to adequately support renal function. In the presence of normal renal function the specific gravity and volume of the urine is the best index of water need. In temperate climates 2,000 cc. daily will usually satisfy basal metabolic requirements, but this is varied in accordance with the patient's clinical appearance and the urinary observations. The oral route should be utilized as early as possible, but if parenterally administered fluids are required, 5 per cent dextrose in water is the solution of choice.

Electrolyte requirements are variable and are directly dependent on the extent of abnormal losses. The body has adequate reserves of sodium chloride, and in the presence of normal renal function these reserves are jealously protected by the kidneys. Electrolytes should be replaced only as lost and on a volume for volume basis, utilizing hypotonic sodium chloride solution, thereby combating the water and electrolyte deficits simultaneously. Sodium chloride should not be given routinely in the immediate (forty-eight hour) postoperative period, and the value of supplying a daily maintenance dose throughout the remainder of convalescence is questioned. In the event of large abnormal losses of fluid from the gastrointestinal tract, the potential disturbances of the acid-base relationship must be anticipated and combated. If clinical evidence of deficits of sodium chloride and water develops, the condition should be treated intensively, even at the risk of precipitating edema. If renal function is normal and the urinary output is more than 1,000 cc. daily, determination of urinary chlorides (Fantus test [27]) is of aid in determining sodium chloride needs from day to day.

If anemia has been corrected preoperatively and blood loss replaced simultaneously during operation, postoperative transfusions of blood are given only as the need arises. Such need may be anticipated in severe sepsis, intestinal obstruction and secondary hemorrhage or when large weeping wounds are present.

Nutrition.—It is our belief that the important goal in postoperative nutrition is the return of the patient to the oral intake of whole natural foods as rapidly as possible. The only contraindication to the offering of solid foods by mouth is the inability of the patient to retain them because of vomiting, paralytic ileus or intestinal obstruction. Gastrointestinal anastomoses are not considered contraindications to oral feeding. Patients who have undergone operations such as colonic resections with primary anastomoses are given solid foods as rapidly as they are tolerated, usually by the second or third postoperative day. We do not subscribe to the indiscriminate administration of protein hydrolysates or amino acids in the immediate postoperative period but reserve their use for the occasional patient who is deprived of the oral or gastrojejunal route of feeding for a prolonged period.

There is rather widespread concern at present over the negative nitrogen balance usually encountered

23. Ries, E.: Some Radical Changes in the After-Treatment of Celiotomy Cases, J. A. M. A. **32**:454 (Aug. 19) 1899.
24. Leithauser, D. J., and Bergo, H. L.: Early Rising and Ambulatory Activity After Operation, Arch. Surg. **42**:1086 (June) 1941.
25. Coller, F. A.; Campbell, K. N.; Vaughan, H. H.; Ish, L. V., and Moyer, C. A.: Postoperative Salt Intolerance, Ann. Surg. **112**:533, 1943.
26. Cooper, D. R.; Ish, L. V., and Coller, F. A.: Response to Parenteral Glucose of Normal Kidneys and of Kidneys of Postoperative Patients, Ann. Surg. **129**:1, 1949.
27. Fantus, J. B.: Fluid Postoperatively, J. A. M. A. **107**:14 (July 4) 1936.

in the immediate postoperative period. Proteins are frequently administered parenterally in an effort to overcome this. Cuthbertson and associates [28] first called attention to the definite increase in the excretion of urinary nitrogen following trauma, and this phenomenon has been related to the general adaptation syndrome of Selye.[29] This catabolic effect in protein metabolism is sometimes ascribed to a cannibalistic effort on the part of the body to mobilize essential amino acids from the protein reserves to aid in repairing the tissue at the site of injury. There is no evidence, however, that the administration of essential amino acids at this stage will prevent protein catabolism.

Although parenterally administered proteins are capable of maintaining a positive nitrogen balance later in the postoperative period, whole proteins given orally are more efficiently utilized than the protein hydrolysates administered either orally or intravenously.[30] Koop and associates [31] found the intravenous administration of protein to be extravagant and wasteful in that almost twice as much protein nitrogen is required to maintain a positive nitrogen balance when administered parenterally as when given orally. A 30 per cent higher caloric intake is also required before a positive nitrogen balance is obtained.

Ravdin [32] has drawn attention to the fact that too much emphasis is being placed on the clinical value of maintaining a positive nitrogen balance as determined by laboratory criteria. In the present state of knowledge of protein metabolism one cannot be certain that the retained nitrogen is utilized to restore depleted tissue and plasma proteins or that maintaining a positive nitrogen balance is of primary importance. A patient never dies as a result of a few days of negative nitrogen balance, which is fortunate, because there seems to be no way of obviating this condition after severe trauma.

Carbohydrates are necessary for their caloric value and for their protein-sparing effect. It is impossible to supply sufficient carbohydrates by the intravenous route to satisfy caloric requirements without seriously overhydrating the patient. It has been demonstrated, however, that 100 Gm. of dextrose, the amount contained in the 2,000 cc. of 5 per cent dextrose solution found necessary to satisfy the daily water requirements, is sufficient to prevent significant diversion of proteins to meet energy requirements. The caloric requirements must be met as rapidly as possible by oral feedings of carbohydrate and fat.

Vitamin requirements during this period are the same as during the preoperative preparation. They may be given parenterally in dextrose solutions but not with protein hydrolysates.

Measures Commonly Misused in Postoperative Care.—Physiologic disturbances of the gastrointestinal tract, both functional and organic, are frequent after operative procedures and may be the chief source of discomfort for the patient. The introduction of constant gastroduodenal suction has been a great aid in managing this problem. It relieves vomiting and discomfort during transient disturbances of gastrointestinal motility and is a surgical necessity in organic obstruction or generalized peritonitis.

However, this valuable adjunct is frequently misused. Its routine use after every abdominal operation, including cholecystectomy and intestinal anastamosis, is unnecessary and may be actually detrimental in that it is uncomfortable and discourages mobilization. If gastric distention or vomiting develop, suction should be instituted immediately and employed intermittently or continuously until motility returns. This is seldom necessary. Only after gastric surgery is suction routinely employed and then it is maintained for only twenty-four to forty-eight hours.

The Miller-Abbott tube is invaluable in the management of prolonged ileus or mechanical obstructions incident to difficult abdominal operations. By its judicious use secondary laparotomy may be averted or greatly simplified. We have not found use of the Miller-Abbott tube necessary after intestinal anastamosis in order to protect the suture line. Neither do we consider that such stimulants as neostigmine methylsulfate or beta-hypophamine (pitressin®) have a place in the management of postoperative distention.

Sedatives, particularly the morphine derivatives and barbiturates, are often given without justification. When properly utilized, these are extremely helpful drugs. When used unnecessarily, the return of normal physiologic processes may be unnecessarily retarded. All too often they are given in the absence of specific indications.

Cathartics and enemas are universally grossly misused. This is doubly true during surgical convalescence. Food is the natural stimulus for peristalsis and defecation. If appetizing meals rather than potent cathartics are served during the postoperaitve period, peristalsis will be promptly resumed in a normal rhythm. Normal bowel habits will return relatively early, provided they are not discouraged by prolonged bed rest and use of the bed pan. Routine postoperative enemas and cathartics are unnecessary and should be deprecated.

Management of Complications.—The prevention, prompt detection and treatment of complications demand constant attention during the early postoperative period. This necessitates careful evaluation of the patient's every complaint and prompt investigation of significant fluctuations of temperature, pulse and respiratory rate. The more frequent and important complications will be briefly discussed.

Pulmonary Complications.—Most cases of postoperative or hypostatic pneumonia are secondary to atelectasis. Every case of pneumonitis of this type discernible by roentgen examination must be regarded as evidence of a lapse in postoperative care. Atelectasis is preventable if a stringent program for keeping the tracheobronchial tree free of secretions during the early postoperative period is followed. Effective measures for attaining this include enforced cough and hyperventilation, intermittent tracheal suction and resort to bronchoscopy if more conservative measures fail. The antibiotics are wholly ineffective in preventing this complication, and their routine use as prophylaxis totally ignores the pathogenesis of the lesion.

Atelectasis should always be suspected in event of a sharp rise in temperature in the first forty-eight hours after operation. Diagnosis is readily made by physical signs. Although roentgen examination is a helpful adjunct, valuable time may be lost by relying on it completely for diagnosis. Once the diagnosis is

28. Cuthbertson, D. P.; McGirr, J. L., and Robertson, J. S. M.: The Effects of Fracture of Bone on the Metabolism of the Rat, Quart. J. Exper. Physiol. **29**:13, 1939.
29. Selye, H.: The Alarm Reaction, in Piersol, G. M., and Bortz, E. L.: The Cyclopedia of Medicine, Surgery and Specialties, Philadelphia, F. A. Davis Company, 1943, vol. 13, p. 15.
30. Madden, S. C.; Bassett, S. H.; Remington, J. H., Martin, F. J. C.; Woods, R. R., and Shull, F. W.: Amino Acids in Therapy of Disease, Surg., Gynec. & Obst. **82**:133, 1946.
31. Koop, C. E.; Riegel, C.; Griggen, R. P., and Barnes, M. T.: A Study of Protein Hydrolysates, Casein, Gelatin and Glucose in Parenteral Nutrition, Surg., Gynec. & Obst. **84**:1065, 1947.
32. Ravdin, I.: Nitrogen Balance, editorial, Surgery **24**:1035, 1948.

established, effective treatment requires that the tracheobronchial tree be cleared of obstruction and kept clear. Antibiotic therapy is warranted at this time to aid in the control of secondary pneumonitis.

Thromboembolism.—Thromboembolism is a distressing complication, from the standpoint of both immediate mortality and prolonged morbidity. It has stimulated much investigation in recent years, and divergent methods of control have been evolved. Although we still do not have the final answer as regards optimal management of this condition, a large cumulative clinical experience is now available and certain generalizations are permissible.

The early detection of phlebothrombosis is the greatest single aid in reducing the incidence of pulmonary embolism. This requires constant vigilance on the part of the surgeon, as the patient's subjective symptoms are minimal. The veins of the leg are most commonly involved, and, fortunately, definite clinical signs are present and can be easily elicited if sought. The diagnosis should be suspected whenever there is a simultaneous rise in temperature, pulse and respiratory rate (Allen's sign). The legs should be examined routinely once or twice daily for evidence of edema, tenderness of the calf, pain on dorsiflexion of the ankle (Homan's sign) or distention of the superficial veins of the leg. Daily measurements of the calf and thigh are obligatory.

Once the diagnosis has been made, prompt treatment is mandatory. The choice between the use of anticoagulant therapy (heparin sodium and/or dicumarol®) and ligation of the deep veins of the leg or vena cava is frequently difficult. Each has its enthusiastic advocates; specific indications are at present not absolute. A choice must depend somewhat on the surgeon's own personal experience with the alternative methods, the availability of the laboratory facilities necessary for the control of anticoagulant therapy, the relative expense of the methods and the condition of the patient. We favor the use of anticoagulants except in patients with advanced degenerative disease, those in whom a bleeding hazard exists or those in whom repeated or septic emboli develop while they are receiving anticoagulant therapy. Blocking of the sympathetic nerves is an important measure when evidence of vasospasm is present.

Sepsis.—Infections of the urinary tract and sepsis of the wound are frequent causes for fever during surgical convalescence. Pelvic and subphrenic abscesses may develop insidiously. Frequent rectal examinations and repeated fluoroscopic visualization of diaphragmatic movements are of paramount importance in the detection of the cause for sepsis. Such infections are readily controlled by appropriate surgical drainage and antibiotic therapy.

Renal Insufficiency.—Until recently the development of pronounced oliguria or anuria following severe trauma, shock or reaction to transfusion was almost always fatal. Various forms of treatment have been utilized in the past, including decapsulation of the kidneys, peritoneal irrigation, gastrointestinal lavage and splanchnic blocks, but none has been uniformly effective. Recently a plan of treatment has been evolved which is effective in maintaining life until healing of the renal lesions occurs.[33]

Essentially this plan entails the careful limitation of fluid intake during the period of renal insufficiency to that volume just sufficient to replace the insensible loss. The administration of excessive fluid at this time does not stimulate increased urinary output; the excess fluid is retained and ultimately kills the patient.

As renal function returns, large volumes of urine with a high sodium chloride content are excreted. Death may result from dehydration and sodium chloride depletion during this phase. All water and salt losses must therefore be accurately and promptly replaced during these few days of diuresis. Following this, return of normal renal function may be anticipated.

SUMMARY

One may generalize by saying that if one will restore the patient to as near normal as possible before operation, maintain him thus during and after operation, not complicating his progress by needless treatment but unceasingly watching him for complications, there is an excellent chance that every one needing operative treatment may be carried through a successful convalescence.

1313 East Ann Street.

33. Moirhead, E. E.; Haley, A. E.; Haberman, S., and Hill, J. M.: Acute Renal Insufficiency Due to Incompatible Transfusion and Other Causes with Particular Emphasis on Management, Special Issue no. 2 of Blood: The Journal of Hematology, New York, Grune & Stratton, Inc., 1948. Coller, F. A.; Campbell, K. N., and Ich, L., V.: The Treatment of Renal Insufficiency in the Surgical Patient, Ann. Surg. 128:379, 1948.

ADAPTATION OF SUPPORTIVE TREATMENT TO NEEDS OF THE SURGICAL PATIENT

FRANCIS D. MOORE, M.D.
Boston

The nature of the treatment which surgeons must employ in support of the convalescent patient is determined by the body's own compensation to injury. This compensation, in turn, is conditioned by the physicochemical system which comprises the living organism, and by those neuroendocrine adjustments which are called into play in emergency situations.[1] These adjustments, such as sympathoadrenal discharge, glycogenolysis, lympholysis, vasoconstriction and adrenocortical response, are complex glandular and visceral interactions, the result of epochs of vertebrate evolution, and they enable the human being to survive remarkably extensive trauma. The purpose of the surgeon should be to evaluate these conditions which the body is creating for itself before he imposes new conditions or injects substances intended to promote convalescence. It is my purpose herein to outline some of the important phenomena concerned in the physicochemical system of the organism and in the adjustment to trauma, and to review briefly those steps which the surgeon may take to assist the organism in its return to normal conditions. Acknowledgment is made of the work of many others, both in the laboratories with which I am associated and elsewhere, for the data on which these concepts are based.

This work was also aided in part by support provided by Mead Johnson & Company, Winthrop-Stearns, Inc., and the Warren Benevolent Fund.

From the Departments of Surgery of the Harvard Medical School and the Surgical Services at the Peter Bent Brigham Hospital and the Massachusetts General Hospital.

Read before the Section on Surgery, General and Abdominal, at the Ninety-Eighth Annual Session of the American Medical Association, Atlantic City, N. J., June 9, 1949.

Because of lack of space, this article is abbreviated in THE JOURNAL by omission of a portion of the text, footnotes, tables and illustrations. The complete article appears in the author's reprints.

Much of the work described herein was carried out with the support of the Atomic Energy Commission, under a contract between the Office of Naval Research and Harvard University. Heavy water used in these studies has been obtained through a grant from the Committee on Growth of the National Research Council.

THE WATER-SOLUBLE AREA

The working tissues of the body are energy-exchanging muscles and viscera. This body engine is characterized by the presence throughout of water in which is dissolved or suspended the substances involved in oxidation-reduction reactions. Within this lean body mass are several sets of membranes across which water, electrolytes, crystalloids, colloids and cells may pass at varying rates, rates which are characteristic for each membrane and for each solute concerned. The rates at which these transfers take place determine the rate at which the body can respond to injury by transfer of substances from one area to another. This energy-exchanging portion of the human body is relatively constant in composition [3] and ceases to exchange energy efficiently if the composition is altered; it is therefore most vulnerable to failure of homeostasis. Its maintenance and support is the objective of therapy. This portion of the body consists anatomically of striated muscle, heart, lungs, liver, viscera and the vascular tree.

This water-soluble area of the body is held up and moved about by strong supporting or covering structures (bone, fascia, tendon and skin) which differ widely in composition and in whose matrix there is generally much less water and a much larger fraction of extracellular solids such as collagen, elastin and calcified matrix. These structures are much less sensitive to acute metabolic derangement and do not enter as prominently into an analysis of the needs of the body in injury and depletion. These supporting and covering structures comprise about 40 per cent of body weight, the lean body mass about 60 per cent.[3]

Until recent years, there has been relatively little knowledge of the rates at which water and solutes move about within the water-soluble portion of the body. Although one might inject large amounts of water and salts into this area to study the changes produced, the injection itself might alter the very relationships one wished to observe. With the advent of the tracer technic—using radioactive or stable isotopes of the common elements—the rate at which substances move about in this water phase may be intensively studied.[4] Such studies consist, in essence, of injecting

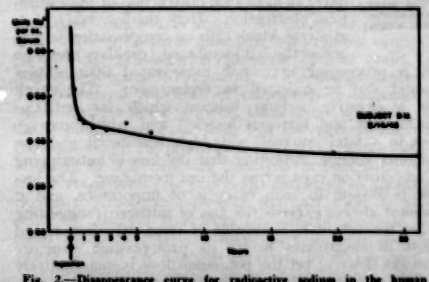

Fig. 2.—Disappearance curve for radioactive sodium in the human subject.[10] Equilibrium of distribution in extracellular fluid is obtained in fifty to sixty minutes, an index of the permeability of the capillary to sodium. The slow drop to twenty to twenty-four hours probably indicates permeation and exchange of sodium into cells and bone.

the tracer substance into the body and noting the rate at which it disappears from the extracellular phase and the rate at which it appears in some other phase of body water, either interstitial or cellular fluid.

Since water itself is the universal solvent, the rate at which the water molecule moves about is of great interest and of considerable relevance in assessing the rate of internal compensation to external injuries. The equilibrium curve for a tracer dose of water (as heavy water) is shown in figure 1. It is apparent that rapid diffusion throughout body water takes place, indicating great permeability of all the membranes of the body to this substance and indicating further the efficiency of circulatory exchange from the capillary bed. It should

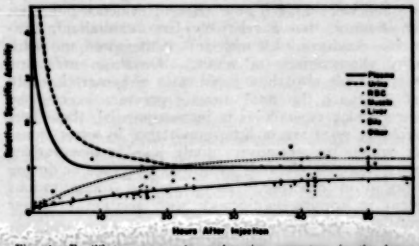

Fig. 4.—Equilibrium curve for radioactive potassium in the human subject. Distributional dilutions involve both intracellular and extracellular phases; approximate equilibrium is obtained in about fifteen hours. The extent of dilution of radioactive potassium in stable potassium, indicated by the specific activity (as shown along the ordinates), is the basis of the measure of total exchangeable potassium (table 3). The red blood cell exchanges potassium more slowly than other tissues, possibly because it is not nucleated and is not involved in active exchange of energy. Tissues studied in these patients, in addition to liver, were normal stomach, muscle, colon and gastric carcinoma. The light solid line is drawn freehand through the average red cell values; the light dotted line similarly through the tissue points.

be pointed out that this equilibrium curve for water involves passage across both the fast membrane (the capillary) and the slow membrane (the cell membrane). From this curve, calculations have been carried out indicating that approximately 73 per cent of blood water passes through the capillary wall every minute.[5] The extreme rapidity with which metabolic changes in the water-soluble area may be communicated throughout the body is apparent.

Although atomic exchange of water hydrogen occurs with great rapidity, mass shifts of water in response to dehydration or rehydration take place at a somewhat slower rate, because the water moves only as fast as its electrolytes will permit it to move. Otherwise, it is moving up an osmotic gradient, a procedure which requires metabolic work for its accomplishment. For these reasons, it is of interest to examine the rates of equilibrium of ions in this water-soluble system. In figure 2 is shown the equilibrium curve for the sodium ion. A rapid mixing and diffusion phase ceases as equilibrium is reached across the capillary, an event requiring approximately sixty minutes. There is then a much slower phase of equilibrium, generally interpreted as the movement of sodium into cells and bone followed by dilution and excretion.[6] Since water can cross the capillary as fast as extracellular ions, this places the capillary as a fast membrane, across which massive transfers may occur with rapidity. Curves for chloride and bromide are obtainable which demonstrate the same order of magnitude of transfer rate of anions across the capillary. A curve for bromide ion constructed between plasma and lymph demonstrated [7] that essentially complete transfer had taken place at the end of twenty minutes (fig. 3).

The equilibrium curve for an intracellular ion, potassium, displays an entirely different character, as shown in figure 4. There is no discernible break at the capillary, but instead a steadily descending curve indicates

equilibrium throughout most of the body tissues in twelve to twenty hours. This is the equilibrium curve of an ion whose predominant position is intracellular; the curve is the resultant of forces acting across the cell membrane rather than across the capillary, although the capillary must be crossed in transit.

Moving up the scale of particle size from ions to crystalloids, one finds rates of exchange which are characteristic for each molecular configuration, shape, size and net charge if any. Recent evidence indicates, for instance, that a relatively large crystalloid, antipyrine, conducts itself with almost the speed and solubility characteristic of water.[8] Dextrose, urea and sulfanilamide also show rapid rates of penetration into cells.[9] Since the total osmotic pressure exerted by extracellular crystalloids is inconsequential, these permeability rates are of little importance in water transfer within the organism. Only when concentrations are appreciably elevated, as in hyperglycemia or during infusion of dextrose,[10] do crystalloid concentrations begin to acquire significance with relation to water transfer.

Shifting up another big step in the scale, one comes to the smallest of the circulating solute proteins, albumin. There is now a wealth of evidence that, far from being confined to the plasma, almost half the albumin is outside of the blood stream in interstitial spaces, especially in lungs, liver[11] and visceral lymph where the capillary appears to be almost as permeable to albumin as it is to electrolytes. In figure 5 is shown an albumin permeation curve into lymph. Since a colloid can exert colloidal osmotic pressure only when facing a membrane impermeable to it, it is clear that the colloid osmotic pressure exerted by albumin is of much greater significance for plasma volume maintenance in the periphery, where the capillary is impermeable to albumin,[12] than in the central viscera, where permeability to albumin is pronounced.

For the large proteins, globulin and fibrinogen, toward the top of the particle-size scale, there are few data on permeability rates save those which suggest that these large molecules do not penetrate membranes with ease.[13] Their high molecular weight and relatively low concentration render them of little colloid osmotic significance in the periphery. In visceral areas, where capillaries are more freely permeable to albumin, these large solute proteins may acquire relatively more oncotic effect than they do in the periphery.

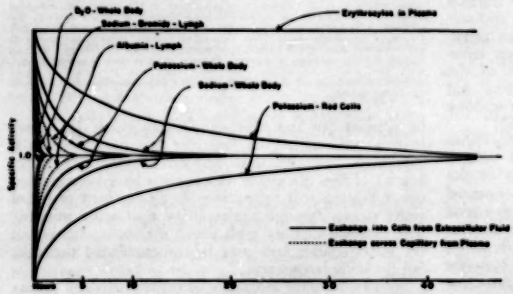

Fig. 7.—Permeability spectrum. This is a diagrammatic representation of the differences in permeability rates of the body membranes to the various substances shown in figures 1 through 6. Solid lines demonstrate equilibrium rates into total body composition, whereas the dotted lines show equilibrium rates across the capillary alone. The upper lines, sloping down toward equilibrium, represent falling concentrations in extracellular fluid; the lower lines, rising to equilibrium, demonstrate increasing concentration within tissues. The straight line for erythrocyte equilibrium is shown above.

Moving up the particle-size scale from the large proteins to the red blood cell is the biggest jump of all. The red blood cell is suspended rather than dissolved in body fluid, and its particle size is of great importance. It is a billion times as heavy and six hundred times as long as albumin.[14] Therefore it has a space-occupying function unique among the substances circulating in the body. The equilibrium curve for the red blood cell is perfectly flat once mixing has occurred (fig. 6). Placed in the normal plasma volume, the red cell cannot escape into any other compartment of body water and its contribution to the maintenance of intravascular mass is therefore far greater than that of any other constituent of the blood.

RATES OF WATER DEPLETION

Varying rates of external loss impose varying problems in internal adjustment. The simplest examples of water loss may be considered as falling into three categories of graded velocity: the slowest is that of gradual dehydration in a thirsting subject, the next in rapidity is water and salt loss over a shorter period of time, as in intestinal obstruction, and the most rapid is external hemorrhage. These will be considered in order (table 1, fig. 8).

The slow rate of water loss involved in dehydration from water deprivation alone occurs in such a fashion that water transfer across both the fast and slow membranes can keep up with the externally imposed conditions. The water loss is approximately prorated through the plasma, extracellular fluid and cell water. Negative balances of sodium are followed later by loss of potassium and nitrogen approximately equivalent to body composition, although nitrogen loss may lag slightly behind potassium loss.[17]

Next in rapidity in the series of phenomena—much oftener observed in surgical cases—is a predominantly extracellular loss occurring over the course of two to seven days, as in pyloric obstruction or high intestinal obstruction. Here the loss takes place at a rate which calls on compensation largely across the fast membrane (capillary) because it is proceeding at a rate more rapid than cellular water can be collected in replacement. The result is a negative sodium balance which far outstrips potassium and nitrogen losses[18] and which may go on to a fatal outcome with high hematocrit and low plasma volume, indicating that the loss is outstripping compensation even across the fast membrane. The loss of potassium in such cases is of importance, and it almost always exceeds the loss of nitrogen (suggesting that the cell mass is capable of some dehydration and loss of electrolytes before its protoplasmic structure breaks down); yet the potassium loss is quantitatively small as compared to the loss of sodium.

The fastest water depletion is the loss of unchanged blood as external hemorrhage. No hematocrit change results until compensation across the fast membrane (capillary) takes place, bringing back into the blood stream a cell-free and relatively protein-free fluid, restoring the plasma volume toward normal but (through dilution of red blood corpuscles and protein) diminishing oxygen transport and effective colloid osmotic pressure. The compensatory redistribution of

body water is largely from the extracellular space. There is a delayed transport of cellular water, which produces an increased potassium excretion and a negative potassium balance.[19]

As a fourth category of rate, the redistribution found in a burn or extensive local trauma should be considered.[20] It is a special case, occurring at a rate intermediate between hemorrhage and extracellular dehydration, and constitutes an instance in which interstitial space enlargement takes place at the expense both of cell water and of plasma volume. The result, in terms of balance, is a positive sodium balance with a negative potassium and nitrogen balance, the latter two of relatively minor import.[21] This alteration is greatly exaggerated in any situation in which renal excretion of sodium is impaired; the enlarged sodium space may indicate not only a large extracellular fluid but, in addition, a shift of sodium (and possibly chloride) into cells both in the traumatized area and elsewhere.[22]

RATES OF SOLID DEPLETION

Rates of loss of body solids may be considered in a fashion analogous to the foregoing section on rates of loss of body water (table 2). It is to be expected that the two will have some association with each other though not necessarily a linear relationship. For instance, following trauma an adaptive response (the alarm reaction) may produce a loss of body solids far out of proportion to losses of body water, whereas in intestinal obstruction water loss outstrips the rate of loss of solids.

It is instructive to consider the rate of loss of body solids in the various types of clinical situations which one encounters surgically. Rates of loss of body solids may be determined by balanced methods,[23] although methods for studying metabolic balances in the acutely ill surgical patient are fraught with many problems not seen in other clinical situations.[18] By making such studies, one may obtain a first approximation of the rate at which the body can deplete itself of certain essential constituents.

PROVISION OF CALORIES

The caloric need of the patient in all categories of depletion (simple starvation, intestinal starvation and the alarm reaction) is acute. By mouth its provision is a matter of no great difficulty, but in many surgical patients the provision of adequate calories orally is impossible because of the nature of the disease process. The parenteral provision of calories is unsatisfactory when dextrose alone is given, because the minimum of 2,000 calories required daily by the patient impose the need for giving prohibitive amounts of water intravenously or administering dextrose in concentrations which are irritating to vein walls and at times produce excessive glycosuria. Despite this fact there is evidence [17b,c] that in starvation amounts of dextrose as small as 50 to 100 Gm. may spare nitrogen to the extent of reducing nitrogen excretion by 50 per cent.

When intubation is not practical or feasible, intravenous caloric provision becomes essential. Intravenously given fat emulsions fill a need here which cannot be filled in any other way, because up to 1,600 calories may be provided by 1 liter of 15 per cent fat,[22] and the clinical effects of this infusion are most gratifying. A wan and haggard, starving patient is transformed in a few days into the picture of progressive convalescence. The work of Dr. Stare and his colleagues in this field will give the surgeon his most important weapon for dealing parenterally with starvation and depletion. Through the interest of the pharmaceutical industry fats for parenteral administration should soon become generally available.

PROVISION OF METABOLICALLY AVAILABLE NITROGEN

Because of the hydrolytic efficiency of peptic and tryptic digestion, orally ingested whole protein is equivalent to an injection of amino acids and small polypeptides into the portal vein. In planning oral protein therapy—seldom possible in surgical starvation—the contribution made by predigestion of the protein into amino-acids is solely that of more rapid assimilation from the intestine. Unless shortening of the small bowel exists, or some other absorptive defect, whole proteins are as useful as their split substitutes when given by mouth.

Intravenously, an entirely different situation exists. Since whole protein is only slowly broken down into the small complexes which can be devoted to other synthetic needs,[23] protein hydrolysates have a theoretic appeal; the nitrogen is readily available for any purpose to which the body may devote it. Their usefulness is vitiated by several facts: first, the nitrogen is excreted

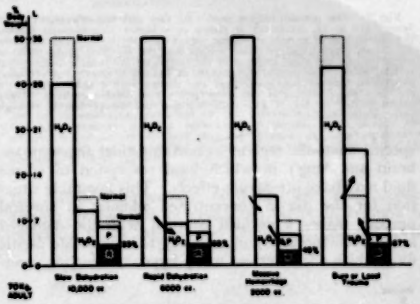

Fig. 8.—Types of water redistribution. A diagrammatic representation of the differences in compensation elicited by slow, rapid and very fast water redistribution. The ordinates are drawn proportional to body weight or phase volume and the heights of the columns demonstrate the approximate order of size of intracellular fluid (H_2O_c), interstitial fluid (H_2O_i), plasma (P) and red blood cell mass (R). The arrows demonstrate compensatory shift of water across the fast membrane (capillary) and the slow membrane (cell). With slow rates of water loss some compensatory distribution can take place across the cell membrane, whereas in arterial hemorrhage this can only occur in a delayed fashion and is relatively small in magnitude. Burn or local trauma produces a selective accumulation of extracellular fluid at the expense of both plasma and cell water. The figure opposite the plasma-red cell boundary indicates the approximate hematocrit reading.

almost quantitatively during the postoperative adaptive period [24]; second, in the absence of adequate caloric nourishment the amino acids appear to be stripped of their nitrogen (which is then excreted), and the remaining carbohydrate is utilized for energy,[18] and third, the human body does not ordinarily take on protein hydrolysates through the systemic venous circuit, and they may not be as efficiently utilized when given in the systemic vein as they are when given into the portal vein and immediately processed by the liver.

One is therefore left with the conclusion that protein hydrolysates provide useful and available nitrogen intravenously when adequate calories are also available and when the patient is not in an immediately post-traumatic adaptive period of poor nitrogen utilization. These two limitations sharply confine the surgical usefulness of protein hydrolysates.

PROVISION OF OSMOTICALLY ACTIVE PROTEIN

Not infrequently the surgeon encounters situations in which normal or nearly normal renal function coexists with a low plasma albumin level and local or widespread edema. The edema fluid may accumulate in

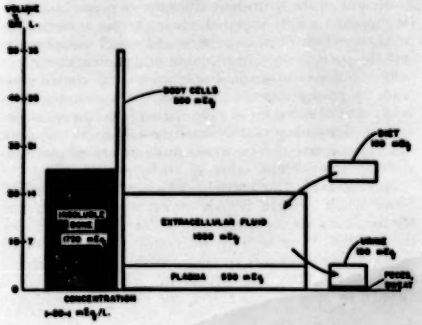

Fig. 9.—The normal sodium pool. In this and the subsequent seven figures (10 to 17, inclusive) is shown in a highly diagrammatic fashion the distribution of certain inorganic ions within the body. The ordinates are drawn proportional to phase volume and the abscissae proportional to concentration; the areas enclosed in the rectangles are roughly proportional to total mass. The normal distribution of sodium is largely extracellular, partitioned between interstitial fluid and plasma with a small quantity in the large phase volume of cell water and a considerable quantity (slowly exchangeable) in bone. The daily sodium flux moves largely through extracellular fluid.

specific anatomic regions (gastrointestinal anastomoses, brain and lung) in which local resorption of edema fluid may have life-saving effects. This favorable situation for the use of concentrated albumin in surgical practice makes a decided contrast with the damaged kidney, albuminuria and tendency to accumulate ascitic fluid which characterizes many hypoalbuminemic medi-

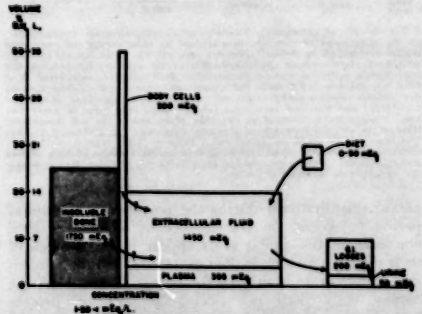

Fig. 10.—Sodium pool. Acute extracellular deficit due to gastrointestinal loss, with negative balance, 200 milliequivalents per day, for thirty-six hours. Gastrointestinal losses as in intestinal obstruction decrease both phase volume and concentration in the extracellular fluid. There is no clearcut evidence as to egress of sodium from bone.

cal patients. Although concentrated albumin passes through the capillary in a matter of hours after its administration, it may in the interim pull fluid back into the blood stream from edematous areas and present this fluid to the kidney for excretion in an extremely useful fashion. If the local change in capillary permeability (trauma, anastomosis or surgical operation) has healed, the edema may fail to reaccumulate and the albumin may perform a service which cannot be rendered in any other way.

The use of concentrated albumin in shock leaves much to be desired because of its poor fluid-holding properties over a twenty-four to forty-eight hour period.[96] The space-filling red blood cell provides a much more permanent increment to intravascular mass and is therefore of much greater use in the treatment of shock and hemorrhage.

The use of concentrated albumin to provide protein for nutritional purposes alone is indefensibly expensive. The chief effort expended in preparing concentrated albumin is its separation from the other plasma proteins and its preparation as a fivefold concentrate of plasma. Neither its separation from larger molecules nor its concentration are of any nutritional significance. As a matter of fact, there is evidence from studies on rats[97] that albumin alone is a poor nutritional protein. Despite these theoretic considerations, in the use of albumin for its nutritional (rather than its osmotic)

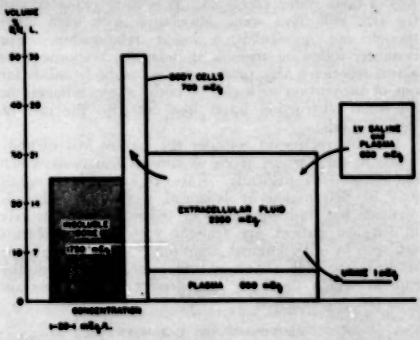

Fig. 12.—Sodium pool. Burns. In the acutely burned patient there is a tendency for the amount of sodium in the interstitial space to expand. This expansion will take place at the expense of the plasma volume, producing shock and death if sodium is not provided. The burn itself and the infusion of sodium both tend to produce some intracellular ingress of sodium and, as in the repair of gastrointestinal losses, phase volume increases while concentration falls; the infusion of large quantities of sodium is often unsuccessful in increasing sodium concentration.

effect there are situations in which its virus-free state is sorely tempting to the surgeon because he can give whole protein intravenously and produce retention of nitrogen (and in occasional cases elevate the plasma protein concentration) in a fashion that cannot otherwise be achieved.

PROVISION OF INTRACELLULAR ELECTROLYTE

The intracellular electrolyte pattern, potassium-phosphate-sulfate-magnesium, is one not ordinarily provided parenterally by the solutions most commonly given. This complex is needed in order for any synthesis of tissue to take place, as are the other building blocks of protoplasm. It is a simple matter to provide these minerals orally, because animal and plant tissues also contain these elements in large quantities. Parenteral provision of these substances is required in three types of situations met in surgical practice; since only potassium has been extensively studied from these points of view, I will limit my remarks to this element. In figures 9 through 16 are

shown diagramatically some of the changes in electrolyte distribution observed in surgical patients.

1. *Chronic Intracellular Potassium Deficit.*—When pure starvation or intestinal starvation exists and can be repaired only by a prolonged parenteral regimen, the addition and provision of intracellular electrolyte is obviously essential, and this fact needs little further explanation. A starved patient who has lost 5 Kg. of muscle tissue needs, among other things, about 600 milliequivalents of potassium to rebuild it. But the concept that one can make him rebuild this tissue simply by giving him the building blocks through an intravenous needle is in radical need of revision. This tissue will not be rebuilt unless the endocrine stimulus for synthesis of tissue is present.

Chronic intracellular potassium deficit on the basis of starvation seldom coexists with a low plasma potassium concentration; most patients suffering from slow starvation maintain a normal extracellular concentration of intracellular electrolytes despite the fact that (at least at the outset) the loss of potassium exceeds the loss of nitrogen.

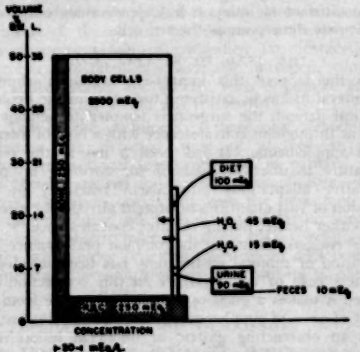

Fig. 13.—Potassium pool. Normal. In striking contrast to the distribution of sodium, only about 2 per cent of the body potassium is extracellular, 98 per cent residing in body cells, of which a certain fraction is in nonexchangeable or slowly exchangeable areas of the red blood cells and bone. The diet and excretion therefore represent a flux not only through extracellular fluid but also through the body cell mass, because in any given day the average adult takes in more potassium by mouth than is to be found in his entire extracellular space.

2. *Differential Intracellular Potassium Deficit.*—The imposing term, differential intracellular potassium deficit, accurately describes the situation so commonly seen in surgical practice in which electrolyte and water loss from cells outstrips the loss of nitrogen and matrix. A differential (disproportionately large) loss of potassium is therefore observed relative to cell proteins and structure. A normal plasma potassium concentration is the rule.

In table 3 are shown the data on which this concept is based; patients with intestinal obstruction, peritonitis, advanced stages of cancer, biliary disease and vomiting show this differential loss of potassium with regularity. The provision of potassium to such patients acquires an importance wholly apart from the provision of nitrogen, and these patients constitute the only true examples of acute potassium deficiency seen in surgical practice. The administration of potassium to a small series of severely depleted patients over periods of many weeks produced several beneficial effects: the maintenance of normal extracellular electrolyte and protein concentrations and urinary output has been found to be simpler; normal muscle tone and intestinal peristaltic activity are readily maintained, and

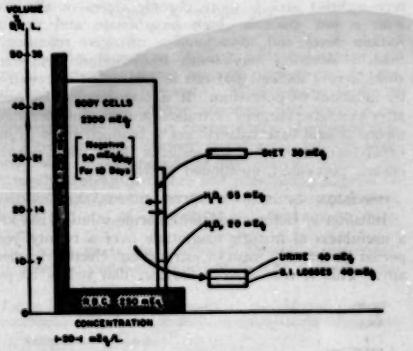

Fig. 14.—Potassium pool. Differential intracellular deficiency (chronic) in patient with normal renal function. This demonstrates the type of situation most commonly seen in surgical patients in whom loss of potassium has occurred largely from body cells and in a fashion disproportionately large with relation to the cell matrix (see table 3). Since the plasma represents a transport area for potassium (and possibly because of endocrine regulation of the extracellular potassium concentration), potassium is often maintained at normal levels despite this cellular depletion. It is clear that the infusion of large amounts of potassium will not rectify this situation unless time is allowed for this potassium to enter the cell.

the clinical improvement of the patient is disproportionate to the dose of potassium either in relation to previous losses or to the continuing balance. The

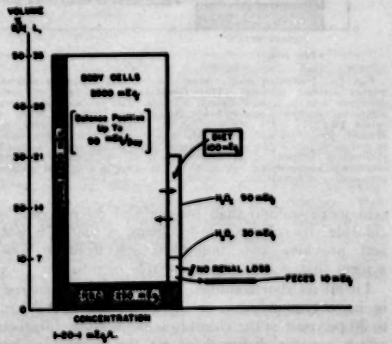

Fig. 15.—Potassium pool. Acute extracellular excess in patient with renal failure. This situation produces an increase in extracellular potassium concentration because the normal route of potassium loss has been shut off. Normal catabolic processes continue, and in many cases potassium intake is unknowingly or unintentionally continued with the result that potassium "piles up" in the body and spills over into the extracellular space. Extracellular concentrations of potassium as high as 8 to 9 milliequivalents per liter may be observed with electrocardiographic changes and peripheral paralysis.

presumption is that these clinical and chemical effects relate not only to the repair of losses but also to the blocking of intracellular ingress of sodium.

3. *Acute Extracellular Potassium Deficit.*—The term acute extracellular potassium deficit is used to denote a low plasma concentration of potassium in the presence of variable cellular reserves; an acute derangement of water and electrolyte distribution not uncommonly observed in states of acute intestinal depletion (dysentery, colitis) and in more chronic states of alkalosis with a low chloride, high bicarbonate and normal sodium level and, occasionally, nitrogen retention.[38] Such a situation may result from sodium-potassium shifts across the cell and can be prevented or repaired by infusions of potassium. It is occasionally observed after extensive surgery or trauma and in acute derangements of acid-base balance, yet it is much rarer in my experience than the intracellular loss with normal plasma potassium, mentioned previously.

PROVISION OF SODIUM WITH DISPOSABLE ANION

Infusion of isotonic sodium chloride solution has had a usefulness of historic magnitude over a twenty year period as the only form of intravenous electrolyte therapy. This is true despite the fact that it has 10 per

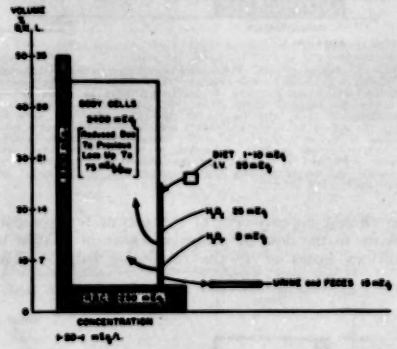

Fig. 16.—Potassium pool. Acute extracellular deficit in patient with treated diabetic acidosis. This demonstrates the type of potassium deficiency seen in treated diabetic acidosis. The pre-existent depletion of potassium (Atchley, Loeb, Richards, Benedict and Driscoll, *J. Clin. Investigation* **12**: 297, 1923) has reduced the cellular reservoir, and the only available potassium with which this metabolism of glucose can take place is extracellular. Potassium has passed into the previously depleted cell, presumably because of glycogenesis and the oxidation of glucose in response to administration of insulin. The result is a drop in extracellular potassium concentration.

cent more sodium than plasma and 50 per cent more chloride; its only excuse for being is that it is isotonic and provides two important extracellular ions in a form that is not readily capable of misuse.

Of all its shortcomings, the most readily correctable is its overabundance of inorganic anion. When 25 to 30 per cent of the chloride is replaced by bicarbonate, which can be disposed of by the lungs, or lactate, which can be oxidized, a solution is produced which has a wide range of usefulness in the replacement of extracellular losses.

PROVISION OF INTRAVASCULAR MASS

Plasma volume replacement in the face of acute loss by the ingress of the interstitial fluid into plasma is a well understood phenomenon.[47] This hemodilution has survival value for the obvious reason that it maintains intravascular mass, however tenuously. It is an internal compensation which must be taken into consideration in planning treatment, especially when treatment has been delayed after the hemorrhage. If retransfusion of all the missing blood is carried out after this internal rearrangement has occurred, an increase in blood volume is produced which may be embarrassing to the heart with low reserve. For this reason, immediate quantitative replacement of blood should be attempted whenever possible. If impossible, late replacement should be undertaken with caution. The use of concentrated cells or protein makes a significant contribution in such situations.

After a serious hemorrhage produces shock, the restoration of circulating blood volume by the infusion of fluid, electrolyte and colloid is notoriously unsatisfactory. The reason is to be found in the transfer of all these substances from the plasma volume to the extracellular phase. In the face of reduced blood volume and blood pressure, they are therefore of but temporary benefit. Any solution containing red blood cells is effective in maintaining blood volume because of the space-occupying property of the red cell particles; no substitute for this large vascular particle will be found to be satisfactory unless it has approximately the same particulate dimension as the red cell.

THE NEED TO BE LEFT ALONE

In the face of this impressive armamentarium of parenteral means of satisfying the needs of the depleted surgical patient, the surgeon is tempted to belabor the patient throughout convalescence with a host of intravenous supplements. It has been a fad in the recent literature to discover methods for covering up postoperative adaptations (the alarm reaction) by the infusion of vast quantities of protein nitrogen or electrolyte either before, during or after convalescence.[48] For many reasons, including its common performance, the operation of subtotal gastrectomy has been selected as the test case or *cause célèbre* in this connection and indeed it makes a good operation to examine from the point of view of supplementation. If a starving patient with an obstructing gastric or duodenal lesion is to undergo surgical treatment full consideration must be given to his nutritional problem, including the use of many of the intravenous devices that have been mentioned in this article, and this attention is best given in the preoperative period when utilization is more satisfactory than early in convalescence.

When a person with no nutritional deficit has had a subtotal gastrectomy performed convalescence is best accomplished by bearing in mind the fact that the human being is well adapted to survival from a single trauma, provided that the normal train of adaptive responses is not upset by meddlesome therapy. To crowd such a patient with mixed electrolyte solutions, protein hydrolysate, concentrated albumin and jejunostomy feeding is to deny the success of an evolutionary process which has produced an organism quite able to survive a single massive trauma with short term interruption of oral intake.

The outcome in a patient in whom a normal alarm reaction develops with his drop in nitrogen balance and loss of potassium is not as much to be feared as that in the depleted or starved patient whose response to surgical intervention is metabolically negligible. Therefore the preoperative evaluation of adrenal cortical function by the eosinopenic response to epinephrine or to

adrenocorticotropic hormone [49] and the employment of stimulatory or replacement steroid therapy in cases of poor adrenocortical reserve may guide the surgeon out of many difficulties. Along with the development of fat emulsion and virus-free dried plasma, this constitutes the surgical nutrition of the future. By such preoperative studies unresponsive patients can be singled out of the preoperative group, and by nutritional and endocrine means it may be possible to improve their adrenocortical reserve for the extensive procedures now included in the wide range of the surgeon's scalpel.

SUMMARY

1. A consideration of the rate of transfer of water, electrolytes, colloid and red blood cells across body membranes, as measured by isotope technics, leads to a better understanding of the internal adjustments which the body makes to trauma, depletion and disease.

2. Rates of loss of water and solids from the body may be arranged in an orderly sequence. These are determined by the intrinsic rates of transfer of substances within the water-soluble area of the body.

3. Based on such data, it is possible to rationalize the needs of the patient for supportive therapy; the intravenous provision of emulsified fat, intracellular electrolytes, metabolically available nitrogen, osmotically active protein and sodium with disposable anion may be evaluated within this framework.

4. Despite the usefulness of these new weapons in combating the depleted state of starved patients approaching surgical intervention or in patients who have become starved following the complications of a surgical operation one is left with the important fact that the previously well person who undergoes surgical treatment is able to tolerate a single trauma with gratifying convalescence provided the surgeon does nothing to interrupt the compensatory mechanisms of nature.

ABSTRACT OF DISCUSSION

DR. CARL A. MOYER, Dallas: Dr. Moore's work is particularly applicable to the ultimate understanding of the forces involved in the movement of water and ions from one compartment of the body to another. Investigations such as this will lead, without a doubt, to improvements in the care of sick persons—preoperatively and postoperatively.

DR. FRANCIS D. MOORE, Boston: In the low concentrations (less than 0.1 atoms per cent), with which one must work, the chances are, and the biologic evidence at hand proves, that deuterium moves much as water does. Furthermore, since deuterium has twice the mass of hydrogen any differences would result in an even faster equilibrium rate for hydrogen. Interest in intracellular chemistry and surgery is great, and progress from research work to therapy is rapid, and that is good—that is the way surgery moves ahead—but at the same time one must be careful and one must be skeptical. When one puts a needle into a vein and injects sodium chloride or bicarbonate, the needle is in the very compartment in which one wants that water and electrolyte to be, namely, the extracellular space, but when one puts the same needle in the same vein and injects a solution containing potassium or phosphate, the needle is separated from its target by a special membrane, namely, the cell. The cell will transfer these substances at its own rate, unaffected by their mere availability in extracellular fluid. The most practical possible outcome of this type of research work and its attendant discussion is the increased skill and knowledge brought to bear on the daily problems of convalescence encountered by the surgeon in his practice.

HYPERFUNCTIONING TUMORS OF THE ADRENAL CORTEX

Study of Nine Cases

WALTMAN WALTERS, M.D.
and
RANDALL G. SPRAGUE, M.D.
Rochester, Minn.

The earlier literature dealing with tumors of the adrenal cortex contains frequent references to the "adrenal cortical syndrome." With closer study of more cases, it has become apparent that there is no single syndrome which is characteristic of adrenal cortical hyperfunction. Rather, the clinical pictures associated with hyperfunction of the adrenal cortex are extremely protean in nature and presumably depend on the type and quantity of steroid hormones produced, the age and sex of the patient and perhaps on other factors.

In recent years the combined efforts of internists, pediatricians, chemists (particularly the steroid chemists), physiologists and surgeons have resulted in substantial additions to knowledge of the syndromes associated with hyperfunctioning new growths of the adrenal cortex. Methods have been developed for the assay of urinary steroids, which are helpful in diagnosis and in determining the results of treatment. For patients presenting clinical syndromes known to be associated with hyperfunction of the adrenal cortex, the problem of differentiating between tumor and hyperplasia has been simplified, though not entirely solved, by methods of urinary assay.[1]

TABLE 1.—*Symptoms of Tumors of the Adrenal Cortex*[*]

1. Nonendocrine symptoms
2. Symptoms dependent on age and sex
Boys: Homologous sexual and somatic precocity
Girls: Sexual and somatic precocity, usually heterologous; sometimes uterine bleeding and enlargement of the breasts
Men: Feminization
Women: Varying degrees of virilism
3. Symptoms independent of age and sex
Altered habitus
Facial and abdominal obesity
Kyphosis
Thin arms and legs
Purplish striae and ecchymoses
High color
Hypertension
Osteoporosis
Diabetes
Acne
Polycythemia
Hypochloremic alkalosis
Purpuric ecchymoses
Fatigue
Muscular atrophy

[*] The table is taken with slight modification from Kepler, Sprague, Mason and Power.[2]

Although no classification of syndromes is entirely satisfactory, the one proposed by Kenyon [2] is excellent. He recognized six types of clinical syndrome, namely:

From the Division of Surgery and the Division of Medicine, Mayo Clinic.

Read before the Section on Urology at the Ninety-Eighth Annual Session of the American Medical Association, Atlantic City, N. J., June 9, 1949.

1. Present day knowledge of the neutral steroids that appear in urine of human beings in normal and abnormal states has recently been the subject of an extensive review (Engstrom, W. W.: Nature and Significance of Neutral Steroids in Human Urine in Normal and in Abnormal States, with a Preliminary Consideration of the Adrenal and Gonadal Steriods and the Factors Which Influence Their Secretion and Biological Action, Yale J. Biol. & Med. 21:21-85 [Oct.] 1948).

2. Kenyon, A. T.: Adrenal Cortical Tumors: Physiologic Considerations, Surgery 16:194-232 (Aug.) 1944.

(1) the adrenogenital syndrome; (2) Cushing's syndrome; (3) mixed clinical pictures including features of the first two; (4) a type characterized by single or isolated endocrine manifestations; (5) feminizing syndromes, that is, feminization of men or homologous sexual precocity in girls, and (6) tumors without endocrine manifestations. The characteristics of these syndromes have been discussed by Kepler, Sprague, Mason and Power.[3]

Inclusive as this classification is, clinicians have been aware for some time that in an appreciable number of the cases the manifestations do not conform to any of the aforementioned clinical syndromes. In such cases the clinical picture is usually mixed or incomplete and consequently defies precise classification.

Among the most spectacular of the changes produced by tumors of the adrenal cortex are those of the sexual aspect. In young boys sexual precocity of the masculine type, in combination with somatic precocity, may occur. In young girls, on the other hand, sexual precocity is likely to be heterologous, or masculine, in character, although homologous sexual precocity with uterine bleeding and enlargement of the breasts occasionally occurs. In adult men the sexual changes are rarely observed, because a masculinizing tumor is not likely to enhance the masculinity of a male, and feminizing tumors are excessively rare in adult males. In adult women, on the other hand, heterosexual changes are relatively common. For example, amenorrhea develops; the breasts assume a more masculine type; the clitoris hypertrophies, and alopecia of the scalp in association with hirsutism and acne of the face, extremities, chest and lower part of the abdomen may occur. The term "adrenogenital syndrome" may properly be applied in cases in which changes in the direction of increased masculinity dominate the clinical picture.

The endocrine and metabolic signs and symptoms which bear no consistent relationship to the age and sex of the patient (table 1) represent an extremely varied group of disturbances. Their most complete development occurs in Cushing's syndrome,[4] but they may occur in varying degree among patients who do not present the complete clinical picture described by Cushing.[5] For example, one of the patients in our series showed some of the features of virilization (hirsutism of the face and extremities and amenorrhea) but in addition exhibited some of the endocrine and metabolic manifestations of Cushing's syndrome (hypertension, ecchymosis, diabetes and a hyperchloremic, hypokaliemic alkalosis). Other patients presenting mixed or incomplete clinical syndromes are seen not uncommonly. As already indicated, these intermediate clinical pictures are most difficult to fit into a rigid classification of syndromes.

HORMONES OF THE ADRENAL CORTEX

To date, twenty-seven steroids have been isolated in crystalline form from the adrenal glands of animals, and their chemical structure has been determined. A considerable number have no demonstrable physiologic activity. Others have striking metabolic effects. Those which have been shown to have physiologic activity fall into several principal groups[6] as indicated in table 2.

TABLE 2.—*Active Compounds Isolated from the Adrenal Cortex*[*]

Compound	Effect	Clinical Symptoms and Signs Which Might Result from Overproduction †
1. Desoxycorticosterone	Salt and water metabolism	Retention of salt and water—edema, hypertension and congestive heart failure; increase in urinary content of potassium; profound muscular weakness
2. 17-hydroxy-11-dehydrocorticosterone (compound E) 11-dehydrocorticosterone (compound A) Corticosterone (compound B) 11-hydroxycorticosterone (compound F)	Carbohydrate and protein metabolism	Negative nitrogen balance, thinning of skin, muscular wasting and weakness, osteoporosis, ecchymosis, diabetes, lymphopenia, eosinopenia
3. 11-dehydrocorticosterone (compound A) Corticosterone (compound B)	Fat metabolism (?)	Obesity (?)
4. Androstenedione 11-hydroxy-ετο-androsterone Adrenosterone 17-hydroxyprogesterone	Androgenic effect	Virilism: hirsutism, baldness, amenorrhea, florid skin, hypertrophy of clitoris, acne, masculinization of habitus and voice in women, sexual and somatic precocity in children
5. Estrone	Estrogenic effect	Vaginal bleeding and sexual precocity in female children; impotence and gynecomastia in men
Progesterone	Progestational effect	

* The table is taken with modifications from Kepler, Sprague, Mason and Power.[3]

† The fact that recently numerous symptoms and signs reminiscent of Cushing's syndrome have been induced in patients with large doses of compound E (17-hydroxy-11-dehydrocorticosterone) may call for some revision of present concepts of the pathogenesis of Cushing's syndrome.

In table 2 also the compound and its effects are correlated with the signs and symptoms produced by excessive amounts. In some instances these correlations are presumptive rather than definitely established.

One of us (W. W.) has operated in 9 cases of the hyperfunctioning tumor of the adrenal cortex (since our report of 10 cases in 1934 and 7 in 1938). In 8 of these 9 cases the urinary content of the 17-ketosteroids was studied, and in 3 cases the urinary content of the corticosteroids (reducing steroids) was determined by a modification of the chemical method of Lowenstein, Corcoran and Page,[7] both before and

3. Kepler, E. J.; Sprague, R. G.; Mason, H. L., and Power, M. H.: The Pathologic Physiology of Adrenal Cortical Tumors and Cushing's Syndrome, in Recent Progress in Hormone Research, the Proceedings of the Laurentian Hormone Conference, New York, Academic Press, Inc., 1948, vol. 2, pp. 345-389.

4. In speaking of Cushing's syndrome we are referring to the clinical picture described by Cushing and not specifically to the pathologic basis of this syndrome. In the past it has been thought that Cushing's syndrome is always associated with a basophilic tumor of the anterior lobe of the pituitary gland. Our experience, as well as that of others, has shown on the contrary that this syndrome may occur in the absence of a basophilic tumor of the pituitary gland but is probably always associated with hyperfunction of the cortex of the adrenal gland.

5. Cushing, H.: Basophil Adenomas of Pituitary Body and Their Clinical Manifestations (Pituitary Basophilism), Bull. Johns Hopkins Hosp. 50: 137-195 (March) 1932.

6. It is realized that the boundaries between groups are not always well defined. A compound in one group may have some physiologic effects characteristic of the members of another group. The grouping is based on the predominant activities of the compounds in question.

7. Lowenstein, B. E.; Corcoran, A. C., and Page, I. H.: Determination of Corticosteroids in Urine, abstracted, Endocrinology 39: 82 (July) 1946.

after operation. In 1 case, that of a man 62 years of age, in which studies of the excretion of hormones were not performed, no obvious endocrine signs or symptoms were associated with a huge left retroperitoneal tumor. The fact that the tumor was a hyperfunctioning carcinoma of the adrenal cortex was not recognized until microscopic examination of the tumor, which weighed 2,685 Gm., and the development of symptoms of postoperative insufficiency of adrenal cortex. The latter were corrected by the administration of adrenal cortex extract. The reduction in the values for 17-ketosteroids after the removal of the hyperfunctioning adrenal cortical tumors in 8 cases is striking (table 3). A reduction of the corticosteroids after removal of the hyperfunctioning adrenal cortical tumors in 3 cases was also observed.

No deaths have occurred in the group of patients who have undergone removal of adrenal cortical tumors since use of this method of preoperative and postoperative treatment was begun. As much cannot be said concerning patients with Cushing's disease on whom partial adrenalectomy has been performed. In our experience the risk of operating on patients of the latter type has been high, but this subject is outside the scope of our paper and will be discussed at a later date.

SURGICAL EXPOSURE AND OTHER CONSIDERATIONS

Air has been injected around the upper pole of the kidney and the adrenal glands to permit roentgenologic visualization in some cases. This procedure, however, has sometimes been followed by untoward reactions and has failed to reveal evidence of small tumors. The

TABLE 3.—*Type of Clinical Syndrome, Pathologic Diagnosis, Excretion of 17-Ketosteroids and Corticosteroids and Results of Dextrose Tolerance Tests in 9 Cases*

Case	Age, Yr.	Sex	Clinical Syndrome	Pathologic Diagnosis Adrenal Cortex	Time of Test	17-Ketosteroids, Mg. Per 24 Hr.	Cortico-steroids, Mg.	Dextrose Tolerance
1	62	♂	No endocrine manifestations	Adenocarcinoma, gr. 3, 2,685 Gm.	No examination of urine for excreted hormones			
2	27	♀	Adrenogenital syndrome	Carcinoma, gr. 2, 25 cm. in diameter	Before operation	241 average for 5 days	.....	Diabetic curve
					Immediate p. o. period	2.1 average for 10 days	.....	
					4 mo. p. o.	10.3	.....	
					11 mo. p. o.	8.6	.....	
					24 mo. p. o.	7.9	.....	
3	45	♀	Adrenogenital syndrome	Adenocarcinoma, gr. 3+, 600 Gm.	Before operation	170.0	.....	
					7 days p. o.	<1.9	.....	
					14 days p. o.	6.9	.....	
4	24	♀	Cushing's syndrome	Adenocarcinoma, low gr. 1, encapsulated, 10.5 Gm.	Before operation	7.3	1.101	Diabetic curve
						3.5	.....	
					4 cor. in 1st	2.9; 1.0; 0.7;	.....	
					4 wk. p. o.	1.1	.....	
					3 wk. p. o.	...	0.762	
					6 mo. p. o.	1.6	.....	
5	15 mo.	♂	Mixed picture	Adenocarcinoma, gr. 2, 40 Gm.	Before operation	4.1	.....	
					Immediate p. o. period	0.2	.....	
					9 mo. p. o.	0.2	.....	
6	62	♀	Mixed picture	Adenocarcinoma, gr. 3, 100 Gm.	Before operation	3.2	1.04	Diabetic curve
					p. o.	0.5	0.638	
						2.1	.....	
7	30	♀	Cushing's syndrome	Hyperplastic adenoma, 7.35 Gm.	Before operation	4.9	1.59	Diabetic curve
						6.7	.....	
					Immediate p. o. period	0.9	.....	
						0.7	0.25	
					5 mo. p. o.	1.6	0.35	Normal curve
8	40 mo.	♀	Mixed picture	Carcinoma, gr. 3, 35 Gm.	3 mo. before operation	6.2	.....	
					Immediately before operation	6.8	.....	
					10 days p. o.	0.3	.....	
					9 mo. p. o.	0	.....	
9	32	♀	Cushing's syndrome (incomplete)	Cellular adenoma, 8 Gm.	Before operation	2.4	2.21	
					Immediate p. o. period	2.2	.....	

PREOPERATIVE AND POSTOPERATIVE TREATMENT WITH ADRENAL CORTEX EXTRACT

Because of the possibility that acute adrenal insufficiency may occur after operation for removal of a hyperfunctioning tumor of the cortex of the adrenal gland, prophylactic measures are instituted in all cases.

Briefly, the preoperative preparation consists of intramuscular administration of 20 to 50 cc. of adrenocortical extract the evening before the operation, and intravenous administration of another dose of the same size in 1 liter of isotonic sodium chloride solution on the morning of the operation. Immediately after excision of the tumor an additional 50 cc. of adrenal cortex extract is administered intravenously. For several days after the operation from 50 to 100 cc. of the extract is given daily; the dose is gradually decreased before the use of the extract is discontinued. If the patient is a child, smaller amounts of extract and fluid are employed. Occasionally desoxycorticosterone acetate is administered in doses of 5 to 10 mg. intramuscularly the morning of the operation.

low mortality rate following operative exposure of the entire adrenal glands, the accuracy of examination and the opportunity for removal or resection of an adrenal gland have led us to use operative exposure instead in cases in which a clinical and chemical study has suggested the presence of a tumor.

The decision concerning which adrenal gland should be exposed first is extremely pertinent if a functioning tumor is suspected. If a tumor is found on the first side explored, it is currently considered unnecessary to expose both adrenal glands, as we have not yet encountered a case of bilateral hyperfunctioning neoplasm of the adrenal cortex. If the location of the tumor can be determined in advance of operation, only the side in which the tumor is present need be exposed. Ordinarily the opposite gland has undergone atrophy from disuse.

The approach which one of us (W. W.) most frequently uses consists of a posterolumbar incision like

that employed for operations on the kidney. The patient lies on the opposite side. Advantages of this approach are that accurate visualization of each gland is possible and the exposure is adequate to deal with whatever type of lesion is encountered. Bilateral incisions are made whenever necessary.

Probably the most important consideration from the surgical point of view is the procedure to follow after the adrenal glands are exposed. When a tumor is encountered, there is little question about the procedure. The tumor should be removed in its entirety. Usually this can be accomplished. In our opinion it is usually advisable to remove the involved gland completely, since most of the tumors are cancerous.

Results following removal of a hyperfunctioning tumor of the adrenal cortex are good in general and are excellent if the lesion is benign. Acne and as a rule hirsutism when present before operation disappear; menstruation and a normal female contour of the breasts return in the adult female. In the female child vaginal bleeding ceases, but the precocious development of the breasts may remain until normal changes occur at puberty. If the tumor has caused lowering of the voice in the female, the pitch may be raised but usually not to normal levels. In other words, the appearance reverts to that normal for the patient and the function of the sexual organs returns to reasonably near normal.

SUMMARY

Hyperfunctioning tumors of the adrenal cortex are capable of producing a wide variety of clinical syndromes, some of which defy precise classification. Many of the symptoms produced by such tumors are tentatively explainable on the basis of overproduction of certain steroid hormones of the adrenal cortex whose physiologic effects are fairly well understood.

Certain clinical data obtained in 9 cases of tumor of the adrenal cortex in which surgical treatment was employed are reviewed. In each instance in which the urinary content of 17-ketosteroids and corticosteroids (reducing steroids) was estimated preoperatively and postoperatively, it was noted as expected that a sharp decrease followed excision of the tumor, even though preoperatively the excretion of these steroids was normal.

Several aspects of the surgical treatment of tumor of the adrenal cortex are discussed. Important among these is adequate preoperative and postoperative treatment with adrenal cortex extract and isotonic sodium chloride solution in order to prevent fatal insufficiency of the adrenal cortex, owing to atrophy of the contralateral adrenal gland, within the first few days after removal of the tumor.

ABSTRACT OF DISCUSSION

Dr. M. M. Melicow, New York: Dr. Cahill has performed over 500 air insufflations without fatality or significant untoward reaction. In every case in which the aerogram was indicative of neoplasm, one was found at operation. Our preoperative and postoperative treatment was essentially the same as that of Drs. Walters and Sprague. Our postoperative results in patients with tumor were better than in patients without tumor. Hirsutism receded except in patients who shaved. We found that neoplasm was the unusual concomitant of the various syndromes, and we are of the opinion that hyperfunction and/or dysfunction of the adrenal cortex may, but need not, be associated with hyperplasia or neoplasia, benign or malignant, unilateral or bilateral. The ratio of benign to malignant tumors was approximately 3 to 1. Microscopically it was difficult to tell malignancy from benignity; unless gross extension or microscopic invasion or metastasis had occurred. We have passed through the period when the gonads were considered the most important elements in the endocrine chain and into the era of the pituitary, the master gland. Now we are in the age of the adrenal gland.

Dr. Hugh J. Jewett, Baltimore: I would like to ask Dr. Walters what considerations led him to use the lumbar approach in preference to a transverse upper abdominal incision, and whether he has any information in regard to the incidence of congenital absence of one adrenal.

Dr. Waltman Walters, Rochester, Minn.: In regard to Dr. Jewett's questions, I have never had any confidence that the accurate identification of small tumors of the adrenal glands can be achieved through a transverse or a vertical upper abdominal incision. That is the reason I do not use it. The easiest and the most accurate way to expose the adrenal gland is the same as that for the exposure of the kidney—through a posterior lumbar incision. I have never seen a case of congenital absence of one adrenal gland, although I realize that such cases have been reported. I have seen patients who had exceedingly small adrenal glands on one side and hyperfunctioning adenomas on the other. Apropos of injection of air, I must say I do not like it. I consider it unsurgical for two reasons: First, the surgeon cannot know precisely where he is putting the air and if the air is injected in the wrong place you know what happens. Second, I do not think it is as accurate as the visual exposure of the gland. Moreover, in a patient who has symptoms of hyperfunctioning of the adrenal, the surgeon is going to operate on the patient with the expectation either of removing a tumor or of performing subtotal adrenalectomy if the clinical picture is that of Cushing's syndrome. In most cases I can see no advantage in the injection of air to determine whether or not a tumor is present. If air is injected around the kidney and around the adrenal gland, it may not be safe to perform operation on those patients immediately for fear of air embolism. This may cause a delay of not only many days but weeks. In regard to the observation of Drs. Melicow and Cahill that some of the female patients with well developed beards continue to have a beard even after the removal of the adrenal cortical tumor, this is a true and distressing fact, for the facial hirsutism is frequently the aspect which is most distressing to the patient. However, it has been my experience in most cases that the hirsutism has disappeared, as has the buffalo-like type of obesity, and menstrual function has returned. Our experiences with the incidence of benign to malignant tumors of the adrenal cortex is about the reverse of that in the series reported by Drs. Melicow and Cahill. The ratio of malignant to benign lesions in our cases is approximately 3 to 1. Unfortunately, we have been able to confirm that in 2 or 3 cases recurrences have taken place, with a return of symptoms of adrenal cortical hyperfunction and eventual death from metastatic cancer.

Pavlov.—This month (September) marks the 100th anniversary of the birth of Ivan Petrovich Pavlov. The great Russian physiologist, who died only 13 years ago, was one of those rare personages in science whose work was known in every country during his own time. . . . Pavlov was a man with obvious natural gifts—a brilliant mind, an incomparable memory, boundless energy and immeasurable enthusiasm—but with all that he remained to the end of his life a transparently simple human being. His laboratory in Leningrad when I worked under him was a tumultuous beehive. Pavlov was then over 80 years old; nonetheless, he still possessed a vast enthusiasm for scientific investigation which he communicated to all those around him. He was the moving spirit in most of the laboratory's projects, and he would greet the successful completion of an experiment with a dance of joy. His laboratory was operated like a town meeting; on Wednesdays his several dozen scientific associates gathered to discuss and argue their problems. Pavlov, who had a gift for dramatic narrative, fascinated his colleagues. He fought tooth and nail for his ideas against all arguments; but after he had cooled down he was quick to admit his error if his opponent turned out to be right. —Jerzy Konorski, *Scientific American*, September 1949.

V 14
1949

Clinical Notes, Suggestions and New Instruments

ECZEMA VACCINATUM

Rapid Recovery Following Treatment with Aureomycin

FREDERICK G. PERRY, M.D.
and
P. C. MARTINEAU, M.D.
Fort Wayne, Ind.

Eczema vaccinatum is a form of generalized vaccinia found in persons, usually infants and children under 5 years of age, with a history of atopic eczema. It is an acute febrile disease with a mortality rate of 33 per cent, according to McKhann and Ross.[1]

A review of previously reported cases may be found in reports by Collett and Kennedy,[2] Ellis [3] and Tedder.[4] Ellis [3] expressed his belief that the vaccinia virus in eczema vaccinatum is circulated by the blood stream and that it tends to localize in traumatized areas of epidermis. He discounted the theory of spread of the virus by autoinoculation. The vesicular lesions of eczema vaccinatum have been reported to occur in almost all areas of the body, including such unusual sites as the eyelids, corneas, tongue, nasal septum and genitalia.

The vesicles appear suddenly and in several large crops during a period of about forty-eight hours. They are multi-

Fig. 1.—R. W. on the fourth day of illness, showing lesions of face, neck and upper part of the chest.

loculated and at first are filled with a crystal clear fluid. Later the central portion undergoes necrosis and may become secondarily infected and purulent. Most of the lesions appear on the previously eczematous skin, although some vesicles may develop on surrounding and apparently normal areas. The regional lymph nodes become enlarged, painful and extremely tender. The eruption is preceded by a period of headache, malaise, drowsiness and fever usually less than twenty-four hours in duration. Most of the deaths reported have been caused by general sepsis or encephalitis. In milder cases the lesions begin to regress and dry up on the seventh

Fig. 2.—Section of rabbit's cornea showing Guarnieri's bodies (*A*). Positive Paul's test on R. W. (hematoxylin and eosin, × 2,600).

to the tenth day. Crusts are formed which are shed about the fourteenth day, leaving pitted scars.

The differential diagnosis of eczema vaccinatum from Kaposi's varicelliform eruption (pustulosis vacciniformis acuta), a condition caused by the virus of herpes simplex, has been said by Tedder [4] to be impossible on clinical grounds alone. Ronchese [5] has expressed his opinion that these two conditions are identical. However, in spite of the clinical similarities of these two diseases the causative viruses isolated from them are entirely different (Barton and Brunsting [6] and Ebert [7]).

Paul's test is the most convenient laboratory method of distinguishing between the two diseases. In cases of eczema vaccinatum acidophilic intracytoplasmic inclusion bodies are found, but in Kaposi's varicelliform eruption much smaller basophilic intranuclear inclusion bodies are present.

The history of the exposure of a patient to the vaccinia virus during the period two to three weeks immediately preceding the onset of the disease is also of great diagnostic value, as is shown in the following case report.

REPORT OF CASE

R. W.,[8] a boy aged 2 years, had had a history of atopic eczema since 3 weeks of age. On May 7, 1949 and the next day he played indoors with a child who had been vaccinated for smallpox on April 20, 1949. He sat next to her as they examined a book together. The vaccination wound on the arm of his playmate was uncovered and was in the crusted stage.

Four days later the child became acutely ill; he was drowsy and listless, and he had a high fever. After about twelve hours a vesicular eruption appeared on his neck; during the next two days it spread so rapidly that on May 14, when he was admitted to the Lutheran Hospital, umbilicated vesicles were present on the cheeks, the lateral aspects of the face and neck, the anterior aspect of the upper part of the chest,

Dermatologist, Duemling Clinic (Dr. Perry), and Pathologist, Lutheran Hospital (Dr. Martineau).
Dr. Michael Ebert, associate clinical professor of dermatology, University of Illinois College of Medicine, assisted in handling this case.

1. McKhann, C. F., and Ross, R. A.: Generalized Vaccinia and Eczema Vaccinatum, M. Clin. North America **22**:785, 1938.
2. Collett, R. W., and Kennedy, R. L., Jr.: Accidental Vaccinia: Report of Two Cases in Infants, with Eczema Vaccinatum in One Case, J. Pediat. **34**:284, 1949.
3. Ellis, P. A.: Eczema Vaccinatum: Its Relation to Generalized Vaccinia; Report of Two Cases, J. A. M. A. **104**:1891 (May 25) 1935.
4. Tedder, J. W.: Eczema Vaccinatum, Arch. Dermat. & Syph. **34**:1008 (Dec.) 1936.
5. Ronchese, F.: Dermatitis Vaccinia (Kaposi's Varicelliform Eruption), Arch. Dermat. & Syph. **47**:613 (May) 1943.
6. Barton, R. L., and Brunsting, L. A.: Kaposi's Varicelliform Eruption; Review of the Literature and Report of Two Cases of Its Occurrence in Adults, Arch. Dermat. & Syph. **50**:99 (Aug.) 1944.
7. Ebert, M. H.: The Herpes Problem, M. Clin. North America, (Chicago Number) **33**:145, 1949.
8. Private patient of Dr. Richard Smith.

the extensor surfaces of the arms and the anterior aspects of both thighs. These lesions were confluent over large areas. The patient's temperature was 104.8 F. He was drowsy, listless and prostrated. His eyes were swollen shut, and he had a photophobia. There was also a generalized lymphadenopathy, with some of the axillary and inguinal lymph nodes measuring as much as 3 cm. in diameter. These lymph nodes were extremely tender and somewhat warm. The white blood cell count was 13,750; this gradually rose during the next ten days to a peak of 34,000. Biopsy of a vesicle taken from the thigh on the fourth day of illness was histologically typical of a vaccinia or smallpox lesion, including reticulating colliquation, balloon cells and Guarnieri's bodies in the cells of the stratum mucosum. Reaction to Paul's test was positive for the vaccinia virus. The fluid in many of the vesicles was entirely clear. Paschen bodies were not identified in smears, and few bacterial contaminants were present.

The child was treated locally with application of boric acid compresses and systemically by administration of penicillin, 20,000 units each four hours for the first two hospital days. On the evening of the second hospital day penicillin therapy was discontinued and aureomycin was given in doses of 250 mg. each six hours. Recession and drying of the vesicles were noted within twenty-four hours, and within forty-eight hours the temperature began to fall rapidly. It was normal within a period of twenty-four hours. The child's general condition improved greatly. The dosage of aureomycin was reduced to 500 mg. per twenty-four hours on the fifth hospital day, and the patient was discharged, apparently well, on the eleventh hospital day. Most of the crusts had disappeared, and there was little scarring.

The rapid recovery of this patient, with the immediate regression and desiccation of the skin lesions, suggested to us that aureomycin may be of special therapeutic value in cases of eczema vaccinatum, generalized vaccinia and possibly smallpox. The mode of action of the aureomycin may be one of controlling secondary infection, or the drug may exert some specific antibiotic action on the virus.

Council on Physical Medicine and Rehabilitation

REPORTS OF THE COUNCIL

The Council on Physical Medicine and Rehabilitation has authorized publication of the following reports.

HOWARD A. CARTER, *Secretary.*

CHESTPIRATOR PORTABLE CHEST RESPIRATOR ACCEPTABLE

Manufacturer: Fabrikators, Inc., of Mass., 19 Walnut Street, Boston 32.

The Chestpirator Portable Chest Respirator is a device for administering artificial respiration in cases of diaphragmatic or intercostal paralysis by the alternating application of negative and positive pressures to the patient's thorax and abdomen.

The weight of the apparatus is given by the firm as 43 Kg. (95 pounds); the shipping weight, foreign and domestic, is 89 Kg. (198 pounds). The apparatus is packed in two containers, one measuring 70 by 61 by 64 cm. (27½ by 24 by 25½ inches) and the other 62 by 57 by 46 cm. (25 by 22½ by 18 inches). A variety of motors can be supplied to work on 110-115 volt alternating current, or 110-115 volt direct current or 24 volt storage battery source.

Evidence was obtained by the Council that the device worked as claimed by the manufacturer and satisfied the published list of minimum requirements for acceptance of respirators of the cuirass type.

The Council on Physical Medicine and Rehabilitation voted to include the Chestpirator Portable Chest Respirator in its list of accepted devices.

SONOTONE PROFESSIONAL TABLE SET MODEL 50 HEARING AID ACCEPTABLE

Manufacturer: Sonotone Corporation, Elmsford, N. Y.

The Sonotone Professional Table Set Model 50 Hearing Aid is designed to be placed on a desk at which physician and patient are seated, the head piece being worn by the hard of hearing patient with whom the physician wishes to converse. The cords are long enough (183 cm., or 6 feet) to allow freedom of movement for the patient and also to reduce the probability of squeal. It weighs 1.36 Kg. (3 pounds) equipped with a single receiver and 1.59 Kg. (3 pounds 8 ounces) equipped with a double head set and head band. The shipping weight is 4.5 Kg. (10 pounds).

It operates on 110 volt current, either direct or alternating. The main instrument is a metal box bearing two control knobs on top and switch handle and cord outlets at the ends; without these protuberances, the box measures 16.5 by 11.4 by 11.4 cm. (6.5 by 4.5 by 4.5 inches). The upper part of the front and back of the instrument are open work, and within can be seen the microphone and vacuum tubes. The vacuum tubes are removable, and there is a pilot light. A complete wiring diagram is pasted on the inside of the removable bottom.

Sonotone Professional Table Set Model 50 Hearing Aid

One dial-type switch on top is labeled "Pitch"; the other is on-off and control of loudness. The switch at the end close to the entrance of the power cord has two positions, "Normal" and "Hi-Cut."

Three receiver units are available. One is a miniature receiver for attachment to a conventional insert ear mold. This receiver is labeled R-30-U. Another is a single, over the ear, ANB-H-1 receiver mounted in a head band labeled HB-7. A small rubber pad serves for counter pressure on the opposite side of the head. The third unit is a pair of similar ANB-H-1 receivers mounted in a similar head band. The receivers have rubber cushions for snug application against the ear. The receiver cords are fabric covered, about 6 feet long, and connect to the main instrument with a large plug.

The "Hi-Cut" switch introduces high frequency suppression that becomes perceptible at 1,000 cycles and amounts to 10 decibels at 3,000 cycles. The extreme low tone position of the variable pitch control introduces low tone suppression that begins at about 1,500 cycles, amounts to 10 decibels at 600 cycles and rises to 20 decibels at 380 cycles.

Users should realize that the maximum output of this instrument with the large receivers is high enough to reach the threshold of pain in some subjects. Such excessive output can usually be avoided, of course, by careful handling of the loudness control, but the patient is not protected against the effect of a sudden loud input, such as the sound of a hard object dropped on the desk on which the instrument rests. Also, the instrument is sensitive to mechanical contact with the box; papers or other objects tossed against the box might prove disconcerting or uncomfortable.

The specimen submitted by the manufacturer was tested thoroughly in a laboratory acceptable to the Council, and evidence was obtained that the instrument was well designed for its purpose and performed in a satisfactory manner. The Council on Physical Medicine and Rehabilitation voted to include the Sonotone Professional Table Set Model 50 Hearing Aid in its list of accepted devices.

V 14
1949

THE CLINICAL SESSION

AMERICAN MEDICAL ASSOCIATION

WASHINGTON, D. C., DEC. 6-9, 1949

OFFICIAL CALL

TO THE OFFICERS, FELLOWS AND MEMBERS OF THE AMERICAN MEDICAL ASSOCIATION

The clinical session of the American Medical Association will be held in Washington, D. C., Dec. 6-9, 1949.

The House of Delegates will convene at 10 a. m., Tuesday, December 6. In the House the representation of the various constituent associations for the clinical session in 1949 is as follows:

Alabama	2	Massachusetts	7
Arizona	1	Michigan	5
Arkansas	2	Minnesota	4
California	10	Mississippi	2
Colorado	2	Missouri	4
Connecticut	3	Montana	1
Delaware	1	Nebraska	2
District of Columbia	2	Nevada	1
Florida	2	New Hampshire	1
Georgia	3	New Jersey	5
Idaho	1	New Mexico	1
Illinois	10	New York	23
Indiana	4	North Carolina	3
Iowa	3	North Dakota	1
Kansas	2	Ohio	8
Kentucky	2	Oklahoma	2
Louisiana	3	Oregon	2
Maine	1	Pennsylvania	11
Maryland	2	Rhode Island	1
		South Carolina	2
		South Dakota	1
		Tennessee	3
		Texas	7
		Utah	1
		Vermont	1
		Virginia	3
		Washington	3
		West Virginia	2
		Wisconsin	3
		Wyoming	1
		Alaska	1
		Hawaii	1
		Isthmian Canal Zone	1
		Puerto Rico	1

The scientific sections of the American Medical Association, the Medical Corps of the Army, the Medical Corps of the Navy, the Public Health Service, and the Veterans Administration are entitled to one delegate each.

The Scientific Program will open Tuesday, December 6, starting at 2 p. m., and will continue throughout the afternoon of that day. The program will continue on Wednesday and Thursday mornings and afternoons, December 7 and 8, and on Friday morning, December 9, closing at 12 noon. The gold medal for an outstanding general practitioner will be presented on Tuesday afternoon at the close of the meeting of the House of Delegates and will be followed by a social hour.

The Registration Bureau, which will be located in the National Guard Armory, will be open from 8:30 a. m. until 5:30 p. m., Tuesday, Wednesday and Thursday, December 6-8, and from 8:30 a. m. to 12:00 noon, Friday, December 9.

ERNEST E. IRONS, President.
F. F. BORZELL, Speaker, House of Delegates.
GEORGE F. LULL, Secretary.

OFFICERS OF THE AMERICAN MEDICAL ASSOCIATION 1949—1950

PRESIDENT—Ernest E. Irons, Chicago.

PRESIDENT-ELECT—Elmer L. Henderson, Louisville, Ky.

VICE-PRESIDENT—James F. Norton, Jersey City, N. J.

SECRETARY AND GENERAL MANAGER—George F. Lull, Chicago.

ASST. SECRETARY—Ernest B. Howard, Chicago.

TREASURER—J. J. Moore, Chicago.

SPEAKER, HOUSE OF DELEGATES—F. F. Borzell, Philadelphia.

VICE SPEAKER, HOUSE OF DELEGATES—James R. Reuling, Bayside, N. Y.

EDITOR—Morris Fishbein, Chicago.

BUSINESS MANAGER—Thomas R. Gardiner, Chicago.

BOARD OF TRUSTEES—John H. Fitzgibbon, Portland, Ore., 1950; James R. Miller, Hartford, Conn., 1950; Walter B. Martin, Norfolk, Va., 1951; Dwight H. Murray, Napa, Calif., 1952; E. J. McCormick, Toledo, Ohio, 1953; Edwin S. Hamilton, Kankakee, Ill., 1953; Gunnar Gundersen, LaCrosse, Wis., 1953; Louis H. Bauer, Chairman, Hempstead, N. Y., 1954; F. J. L. Blasingame, Wharton, Texas, 1954.

JUDICIAL COUNCIL—Louis A. Buie, Rochester, Minn., 1950; Walter F. Donaldson, Pittsburgh, 1951; H. L. Pearson Jr., Miami, Fla., 1952; Thomas P. Murdock, Meriden, Conn., 1953; Edward R. Cunniffe, Chairman, New York, 1954; George F. Lull, Chicago, Secretary.

COUNCIL ON MEDICAL EDUCATION AND HOSPITALS—Russell L. Haden, Crozet, Va., 1950; W. S. Middleton, Madison, Wis., 1951; H. G. Weiskotten, Chairman, Syracuse, N. Y., 1952; Victor Johnson, Rochester, Minn., 1953; W. L. Pressly, Due West, S. C., 1954; Harvey B. Stone, Baltimore, 1955; Guy A. Caldwell, New Orleans, 1956; Donald G. Anderson, Secretary, Chicago.

COUNCIL ON SCIENTIFIC ASSEMBLY—Henry R. Viets, Chairman, Boston, 1950; L. W. Larson, Bismarck, N. D., 1951; Stanley P. Reimann, Philadelphia, 1952; Alphonse McMahon, St. Louis, 1953; Charles H. Phifer, Chicago, 1954; Carl A. Linche, Carrollton, Ohio, 1955; Michael E. DeBakey, Houston, Texas, 1956; and ex officio the President-Elect, the Editor and the Secretary of the Association.

COUNCIL ON MEDICAL SERVICE—Jesse D. Hamer, Phoenix, Ariz., 1950; James R. McVay, Chairman, Kansas City, Mo., 1950; H. M. Mulholland, Charlottesville, Va., 1951; Joseph D. McCarthy, Omaha, 1951; Elmer Hess, Erie, Pa., 1952; Thomas A. McGoldrick, Brooklyn, 1952; R. L. Sensenich, South Bend, Ind.; Ernest E. Irons, Chicago; Walter B. Martin, Norfolk, Va.; George F. Lull, Chicago; Thomas A. Hendricks, Secretary, Chicago.

COUNCIL ON PHARMACY AND CHEMISTRY (Standing Committee of Board of Trustees)—M. Fishbein, Chicago, 1950; G. W. McCoy, New Orleans, 1950; P. H. Long, Baltimore, 1950; E. M. Nelson, Washington, D. C., 1950; Torald Sollmann, Chairman, Cleveland, 1951; Isaac Starr, Philadelphia, 1951; R. F. Loeb, New York, 1951; E. M. K. Geiling, Chicago, 1952; S. W. Clausen, Rochester, N. Y., 1952; Paul R. Cannon, Chicago, 1952; W. C. Cutting, San Francisco, 1953; Joseph Stokes Jr., Philadelphia, 1953; C. Guy Lane, Boston, 1953; Robert T. Stormont, Washington, D. C., 1953; James P. Leake, Washington, D. C., 1954; George W. Thorn, Boston, 1954; Austin E. Smith, Secretary, Chicago.

COUNCIL ON PHYSICAL MEDICINE AND REHABILITATION (Standing Committee of Board of Trustees)—Anthony C. Cipollaro, New York, 1950; M. A. Bowie, Swarthmore, Pa., 1950; G. M. Piersol, Philadelphia, 1950; W. E. Garrey, Nashville, Tenn., 1951; W. W. Colebrook, Washington, D. C., 1951; John S. Coulter, Chairman, Chicago, 1951; Derrick Vail, Chicago, 1951; W. E. Grove, Milwaukee, 1951; A. C. Ivy, Chicago, 1952; Frank R. Ober, Boston, 1952; Frank D. Dickson, Kansas City, Mo., 1952; H. B. Williams, New York, 1953; Frank H. Krusen, Rochester, Minn., 1953; Shields Warren, Boston, 1953; Morris Fishbein, ex officio, Chicago; Howard A. Carter, Secretary, Chicago.

COUNCIL ON FOODS AND NUTRITION (Standing Committee of Board of Trustees)—Harold C. Stuart, Boston, 1950; Morris Fishbein, Chicago, 1950; R. M. Wilder, Rochester, Minn., 1951; Howard B. Lewis, Ann Arbor, Mich., 1951; J. S. McLester, Chairman, Birmingham, Ala., 1951; Philip C. Jeans, Iowa City, 1952; C. A. Elvehjem, Madison, Wis., 1952; William J. Darby, Nashville, Tenn., 1953; George R. Cowgill, New Haven, Conn., 1953; C. S. Ladd, Washington, D. C., 1954; John B. Youmans, Chicago, 1954; James R. Wilson, Secretary, Chicago.

COUNCIL ON INDUSTRIAL HEALTH (Standing Committee of Board of Trustees)—Warren F. Draper, Washington, D. C., 1950; Raymond Hussey, Detroit, 1950; Henry H. Kessler, Newark, N. J., 1950; L. D. Bristol, Harrisburg, Pa., 1951; Paul B. Magnuson, Washington, D. C., 1951; Robert A. Kehoe, Cincinnati, 1951; Harold A. Vonachen, Peoria, Ill., 1952; W. A. Sawyer, Rochester, N. Y., 1952; James S. Simmons, Boston, 1952; Rutherford T. Johnstone, Los Angeles, 1953; A. J. Lanza, Chairman, New York, 1953; C. D. Selby, Detroit, 1953; E. J. McCormick, Toledo, Ohio, ex officio; C. M. Peterson, Secretary, Chicago.

COUNCIL ON NATIONAL EMERGENCY MEDICAL SERVICES (Standing Committee of Board of Trustees)—W. Mck. Craig, Rochester, Minn.; Harold S. Diehl, Minneapolis; Perrin H. Long, Baltimore; Richard L. Meiling, Washington, D. C.; Harold C. Lueth, Omaha; James C. Sargent, Chairman, Milwaukee; Stafford Warren, Los Angeles and ex officio the President and the Secretary of the Association.

COMMITTEE ON SCIENTIFIC EXHIBITS—E. J. McCormick, Toledo, Ohio; Dwight H. Murray, Chairman, Napa, Calif.; F. J. L. Blasingame, Wharton, Texas; Thomas G. Hull, Director, Chicago; Advisory Committee—Howard F. Root, Boston; Paul J. Hanslik, San Francisco; Ludvig Hektoen, Chicago; Urban Maes, New Orleans; H. J. Corper, Denver, Colo.; James P. Leake, Washington, D. C.

REGISTRATION

The Bureau of Registration will be located in the National Guard Armory. An information bureau will be operated in connection with the Bureau of Registration.

Who May Register

Only Member and Service Fellows, Affiliate, Associate and Honorary Fellows, members, qualified physicians who apply for Fellowship, medical students of approved medical schools who are certified to the Secretary of the Association by their respective deans, or interns or residents who are graduates of approved medical schools who are certified to the Secretary of the Association by the superintendents of their respective hospitals, and Invited Guests may register for the Scientific Assembly. Fellows of the Scientific Assembly are those who have, on the prescribed form, applied for Fellowship, subscribed to THE JOURNAL, and paid their 1949 Fellowship dues. Fellowship cards are sent to all Fellows after payment of annual dues and these cards should be presented at the registration window. Any who have not received cards for 1949 should secure them at once by writing to the American Medical Association, 535 North Dearborn Street, Chicago 10.

Members in Good Standing Eligible to Apply for Fellowship in the Association

Members in good standing in the American Medical Association are those members of component county medical societies and of constituent state and territorial medical associations whose names are officially reported for enrolment to the Secretary of the American Medical Association by the secretaries of the constituent medical associations. All members in good standing may apply for Fellowship in the Scientific Assembly and are urged to qualify as Fellows before leaving home in order that pocket cards may be secured and brought to Washington.

Application forms may be had on request.

Those subscribers to THE JOURNAL who have not received pocket cards for 1949 should write to the American Medical Association in order to obtain application blanks and information as to further requirements.

Register Early

Fellows living in Washington as well as all other Fellows who are in Washington on Tuesday and Wednesday should register as early as possible.

The names and local addresses of those who register will be included in the issue of the *Daily Bulletin* appearing the next day, and this will enable visiting physicians to find friends who have registered.

Suggestions That Will Facilitate Registration

Fellows should fill out completely the spaces on both sections of the front of the registration card. Physicians who desire to qualify as Fellows should fill out completely the spaces on both sections of the front of the registration card and sign the application on the back. These cards will be found on the tables.

Entries on the registration card should be written plainly, or printed, as the cards are given to the printer to use as "copy" for the *Daily Bulletin*, which appears on Wednesday, Thursday and Friday mornings during the week of the session.

Fellows who have their pocket cards with them can be registered with little or no delay. They should present the filled out registration card, together with the pocket card, at one of the windows marked "Registration by Pocket Card." There the clerk will compare the two cards, stamp the pocket card and return it and supply the Fellow with a badge and a copy of the official program.

Those Fellows who have sent in their registration card previous to the session should present at any window the identification card sent them after they registered prior to the session.

As previously stated, it will assist in registering if those who desire to qualify as Fellows will file their applications and qualify as Fellows by writing directly to the American Medical Association, 535 North Dearborn Street, Chicago 10.

It will be possible for members of the organization to qualify as Fellows at Washington. In order to do this, applicants for Fellowship will be required to fill out both sections of the front of the registration card and to sign the formal application that is printed on the reverse side of the card. It is suggested that those members who apply for Fellowship at Washington bring with them their state membership cards for the year 1949. The state membership card should be presented along with the filled in registration card at the window in the booth marked "Applicants for Fellowship and Invited Guests."

As already stated, registration can be effected more easily and more promptly if members will qualify as Fellows before leaving home.

Registration for General Officers and Delegates

General officers of the American Medical Association and members of the House of Delegates may register for the Scientific Assembly outside the Presidential Ballroom on the second floor of the Hotel Statler on Tuesday, December 6, before registering with the Reference Committee on Credentials and are advised *not* to register at the Registration Bureau since registration cards have already been made out for their use. It will also be possible for them to register on Sunday, December 4, or Monday, December 5, in the office of the Secretary of the Association, in the Continental Room, Hotel Statler.

This arrangement is made for the convenience of members of the House of Delegates, which will convene on Tuesday morning at 10 o'clock in the Presidential Ballroom, Hotel Statler. Delegates are requested to register for the Scientific Assembly before presenting credentials to the Reference Committee on Credentials of the House of Delegates. Delegates are urged to register early so that all members of the House of Delegates may be seated in time for the opening session of the House.

TRANSPORTATION

Bus Service Between Washington Hotel Center and National Guard Armory

Arrangements have been made with the Washington Public Utility Commission to have quick and frequent special bus service between the hotels and the National Guard Armory.

The buses will run at every five minute frequency between 8:45 and 9:45 a. m. Between 9:45 and 4:00 p. m. buses will leave every half-hour. In the evening when the meeting is over between 4:00 p. m. and 6:00 p. m. the buses will leave the National Guard Armory every five minutes.

The fare for one way service will be only 25 cents. The average length of the trip will be 15 minutes and it offers quite economical transportation for all those attending the meeting.

Railroad or Air Travel

It is suggested that those Fellows who contemplate traveling to Washington to attend the clinical session of the Association secure information concerning railroad and airplane travel directly from their local ticket agents, who are in a position to give them information regarding train or plane schedules and fares.

WASHINGTON HOTELS

It is suggested that if hotel reservations have not yet been secured by Fellows who expect to attend the Washington session, such Fellows fill in and send directly to the Chairman of the SUBCOMMITTEE ON HOTELS, Hotel Reservation Bureau, Star Building, Washington 4, D. C., the application form which may be found in the advertising pages of this JOURNAL.

V 14
1949

MEETING PLACES

HOUSE OF DELEGATES: Presidential Ballroom, Hotel Statler.

SCIENTIFIC MEETINGS: National Guard Armory.

PRESENTATION OF GENERAL PRACTITIONER'S MEDAL: Presidential Ballroom, Hotel Statler.

GENERAL HEADQUARTERS, REGISTRATION BUREAU, SCIENTIFIC EXHIBIT, TECHNICAL EXHIBITS AND INFORMATION BUREAU: National Guard Armory.

Wednesday evening entertainment in Presidential Ballroom, Hotel Statler.

The National Guard Armory is located at 2001 E. Capitol N. W.

LOCAL COMMITTEE ON ARRANGEMENTS

ADMINISTRATIVE COMMITTEES

Oscar B. Hunter, Chairman
W. Ross Morris, Co-Chairman
Mr. Theodore Wiprud, Secretary

John Minor — Walter J. Freeman
William M. Ballinger — Coursen B. Conklin
Herbert P. Ramsey

Advisory Committee

Walter J. Freeman, Chairman
John Minor, Co-Chairman

Winfred Overholser — Harold Jeghers
Walter A. Bloedorn — Paul A. McNally, S. J.
Thomas McPherson Brown — R. W. Bliss
Paul H. Streit — Raymond O. Dart
C. A. Swanson — M. D. Willcutts
F. C. Greaves — Harry G. Armstrong
Leonard A. Scheele — Paul B. Magnuson

Subcommittee on Hotels

Robert J. Coffey, Chairman

James Nolan — Philip Caulfield
Charles P. Ryland

Subcommittee on Transportation

Stanley W. Kirstein, Chairman

Wallace S. McCune — Saul Zuckerman
George Tievsky

Subcommittee on Information and Registration

Robert H. Groh, Chairman
William J. Tobin, Vice-Chairman

Alfred A. J. Den — Walter H. Gerwig
Harvey F. Kreuzberg — John C. Sullivan
Luther H. Snyder — Joseph A. Bailey

Subcommittee on General Meeting

R. Lomax Wells, Chairman
Victor R. Alfaro, Co-Chairman

J. Ogle Warfield — John U. Schwarzmann

Subcommittee on Women Physicians

H. Gladys Kain, Chairman

Margaret M. Nicholson — Alma J. Speer

Subcommittee on Program

J. Ross Veal, Chairman
H. H. Hussey, Co-Chairman
R. L. Sexton, Co-Chairman, Television

Subcommittee on Exhibits

A. Magruder MacDonald, Chairman
Herbert S. Gates, Co-Chairman

HOUSE OF DELEGATES

The House of Delegates will meet at 10 a. m., Tuesday, Dec. 6, 1949, in the Presidential Ballroom, Hotel Statler.

The Reference Committee on Credentials will meet in the foyer outside the Ballroom at 8:30 a. m., Tuesday, Dec. 6, 1949. Credentials should be presented to the Reference Committee on Credentials as early as possible, so that the official roll of the House may be made up and so that the House of Delegates may organize promptly and proceed with its business. The Reference Committee on Credentials will also meet preceding each subsequent meeting of the House of Delegates.

Each delegate should present properly executed credentials signed by the president and the secretary of the constituent association or by the chairman and the secretary of the section he represents. Alternates presenting credentials should see that the delegates whose places they are to take have signed the alternate authorization.

Each delegate, before registering with the Reference Committee on Credentials, should register for the Scientific Assembly at a booth located near the Ballroom.

Rooms have been provided for the use of committees of the House of Delegates. Reference committees are urged to have their meetings in these rooms and to announce the time of their meetings, so that any who are interested in matters referred may be able to appear before the committees.

Typists will be at the service of the members of the House of Delegates for preparing official reports, resolutions and motions.

There should be eight copies of all resolutions, written motions, etc., presented in the House, one copy for preservation in the minutes, six to go to the committee to which the matter may be referred and one to be used as "copy" for the Proceedings. There should be four copies of all reference committee reports. The eight copies or the four copies as the case may be must be handed to the Secretary at the time the matter is presented. Typists in attendance will gladly make these copies on request.

MEETING ROOMS OF REFERENCE COMMITTEES

Reference Committee on—

Amendments to the Constitution and By-Laws....Southwest quarter of Congressional Room
Hygiene and Public Health.....Northwest quarter of Congressional Room
Industrial Health.....Southwest quarter of Federal Room
Legislation and Public Relations.....Northeast quarter of Federal Room
Medical Education.....District Room

Miscellaneous Business.Southeast quarter of Federal Room
Reports of Board of Trustees and Secretary.....Town Room
Reports of Officers....Southeast quarter of Congressional Room
Rules and Order of Business....Northeast quarter of Congressional Room
Sections and Section Work.....Northwest quarter of Federal Room
Executive Session.....Capital Room
Special.....South American Room

MEMBERS OF HOUSE OF DELEGATES, CLINICAL SESSION, 1949

The following is a list of members of the House of Delegates:

ALABAMA—2
Lloyd Noland.....Fairfield
Carl A. Grote.....Huntsville

ARIZONA—1
Jesse D. Hamer.....Phoenix

ARKANSAS—2
William R. Brooksher.....Fort Smith
Rufus B. Robins.....Camden

CALIFORNIA—10
Robertson Ward.....San Francisco
Samuel J. McClendon.....San Diego
Lowell S. Goin.....Los Angeles
John W. Green.....Vallejo
H. Gordon MacLean.....Oakland
E. Vincent Askey.....Los Angeles
John W. Cline.....San Francisco
Donald Cass.....Los Angeles
Ralph B. Eusden.....Long Beach
Lewis A. Alesen.....Los Angeles

COLORADO—2
George A. Unfug.....Pueblo
William H. Hailey.....Denver

CONNECTICUT—3
Thomas P. Murdock.....Meriden
Joseph H. Howard.....Bridgeport
Creighton Barker.....New Haven

DELAWARE—1
James Beebe.....Lewes

DISTRICT OF COLUMBIA—2
C. B. Conklin.....Washington
Herbert P. Ramsey.....Washington

FLORIDA—2
Louis M. Orr II.....Orlando
Homer Lee Pearson Jr.....Miami

GEORGIA—3
Allen H. Bunce.....Atlanta
Cyrus K. Sharp.....Arlington
Benjamin H. Minchew.....Waycross

IDAHO—1
Hoyt B. Woolley.....Idaho Falls

ILLINOIS—10
Rollo K. Packard.....Chicago
Charles H. Phifer.....Chicago
G. Henry Mundt.....Chicago
Bernard Klein.....Joliet
Willis I. Lewis.....Herrin
Robert H. Hayes.....Chicago
Fred H. Muller.....Chicago
Mather Pfeiffenberger.....Alton
E. H. Weld.....Rockford
Everett P. Coleman.....Canton

INDIANA—4
William M. Cockrum.....Evansville
F. S. Crockett.....Lafayette
H. G. Hamer.....Indianapolis
A. S. Giordano.....South Bend

IOWA—3
George Braunlich.....Davenport
Donald C. Conzett.....Dubuque
Gerald V. Caughlan.....Council Bluffs

KANSAS—2
John M. Porter.....Concordia
Philip W. Morgan.....Emporia

KENTUCKY—2
Clark Bailey.....Harlan
J. B. Lukins.....Louisville

LOUISIANA—2
James Q. Graves.....Monroe
Val H. Fuchs.....New Orleans

MAINE—1
Thomas A. Foster.....Portland

MARYLAND—2
Jacob W. Bird.....Sandy Spring
Warde B. Allan.....Baltimore

MASSACHUSETTS—7
Charles J Kickham.....Brookline
L. S. McKittrick.....Brookline
Patrick J. Sullivan.....Dalton
John J. Curley.....Leominster
Walter G. Phippen.....Salem
Frank W. Snow.....Newburyport
Earle M. Chapman.....Boston

MICHIGAN—5
L. G. Christian.....Lansing
William A. Hyland.....Grand Rapids
Wyman D. Barrett.....Detroit
R. L. Novy.....Detroit
Willis H. Huron.....Iron Mountain

MINNESOTA—4
E. W. Hansen.....Minneapolis
Francis J. Savage.....St. Paul
W. A. Coventry.....Duluth
J. Arnold Bargen.....Rochester

MISSISSIPPI—2
James P. Wall.....Jackson
Felix J. Underwood.....Jackson

MISSOURI—4
Howard B. Goodrich.....Hannibal
Warren L. Allee.....Eldon
Robert E. Schlueter.....St. Louis
James R. McVay.....Kansas City

MONTANA—1
Raymond F. Peterson.....Butte

NEBRASKA—2
Karl S. J. Hoblen.....Lincoln
Joseph D. McCarthy.....Omaha

NEVADA—1
Roland W. Stahr.....Reno

NEW HAMPSHIRE—1
Deering G. Smith.....Nashua

NEW JERSEY—5
Joseph F. Londrigan.....Hoboken
William F. Costello.....Dover
J. Wallace Hurff.....Newark
David B. Allman.....Atlantic City
Elmer P. Weigel.....Plainfield

NEW MEXICO—1
JOHN F. CONWAY.....Clovis

NEW YORK—23
John J. Masterson....Brooklyn
J. Stanley Kenney....New York
Thomas A. McGoldrick....Brooklyn
Andrew A. Eggston....Mount Vernon
Peter J. DiNatale....Batavia
George W. Kosmak....New York
Stephen R. Monteith....Nyack
Joseph P. Henry....Rochester
S. L. Smith....Poughkeepsie
Thomas M. D'Ange'o....Flushing
Walter P. Anderton....New York
Albert F. R. Andresen....Brooklyn
James R. Reuling Jr....Bayside
Floyd S. Winslow....Rochester
Herbert H. Bauckus....Buffalo
Thomas M. Brennan....Brooklyn
Ralph T. B. Todd....Tarrytown
William B. Rawls....New York
Edward P. Flood....New York
Leo F. Schiff....Plattsburg
W. Guernsey Frey Jr....New York
B. Wallace Hamilton....New York
Clarence G. Bandler....New York

NORTH CAROLINA—3
R. D. McMillan....Red Springs
C. F. Strosnider....Goldsboro
G. Grady Dixon....Ayden

NORTH DAKOTA—1
John H. Moore....Grand Forks

OHIO—8
L. Howard Schriver....Cincinnati
Clifford C. Sherburne....Columbus
Frank M. Wiseley....Findlay
Herbert B. Wright....Cleveland
Carl A. Lincke....Carrollton
George A. Woodhouse....Pleasant Hill
William M. Skipp....Youngstown
Arthur A. Brindley....Toledo

OKLAHOMA—2
Charles R. Rountree....Oklahoma City
James Stevenson....Tulsa

OREGON—2
Edward H. McLean....Oregon City
Raymond M. McKeown....Coos Bay

PENNSYLVANIA—11
William L. Estes Jr....Bethlehem
James L. Whitehill....Rochester
George S. Klump....Williamsport
Elmer Hess....Erie
James Z. Appel....Lancaster
E. Roger Samuel....Mount Carmel
William Bates....Philadelphia
Francis F. Borzell....Philadelphia
Harold B. Gardner....Pittsburgh
Charles L. Shafer....Kingston
Howard K. Petry....Harrisburg

RHODE ISLAND—1
Charles L. Farrell....Pawtucket

SOUTH CAROLINA—2
Hugh P. Smith....Greenville
Julian P. Price....Florence

SOUTH DAKOTA—1
H. Russell Brown....Watertown

TENNESSEE—3
H. B. Everett....Memphis
Robert B. Wood....Knoxville
Charles M. Hamilton....Nashville

TEXAS—7
A. C. Scott Jr....Temple
B. E. Pickett Sr....Carrizo Springs
E. H. Cary....Dallas
John K. Glen....Houston
Harold M. Williams....Austin
Robert B. Homan Jr....El Paso
Joseph B. Copeland....San Antonio

UTAH—1
James P. Kerby....Salt Lake City

VERMONT—1
Paul K. French....Burlington

VIRGINIA—3
Henry B. Mulholland....Charlottesville
J. Morrison Hutcheson....Richmond
John M. Emmett....Clifton Forge

WASHINGTON—3
Ross D. Wright....Tacoma
Raymond L. Zech....Seattle
Donald G. Corbett....Spokane

WEST VIRGINIA—2
Ivan Fawcett....Wheeling
Walter E. Vest....Huntington

WISCONSIN—3
William D. Stovall....Madison
Stephen E. Gavin....Fond du Lac
James C. Sargent....Milwaukee

WYOMING—1
Roscoe H. Reeve....Casper

ALASKA—1
Paul B. Haggland....Fairbanks

HAWAII—1
Forrest J. Pinkerton....Honolulu

ISTHMIAN CANAL ZONE—1
George R. Wright....Ancon

PUERTO RICO—1
Carlos E. Munoz-MacCormick....Santurce

DELEGATES FOR SECTIONS

INTERNAL MEDICINE
Charles T. Stone....Galveston, Texas

SURGERY, GENERAL AND ABDOMINAL
Grover C. Penberthy....Detroit

OBSTETRICS AND GYNECOLOGY
Jean Paul Pratt....Detroit

OPHTHALMOLOGY
William L. Benedict....Rochester, Minn.

LARYNGOLOGY, OTOLOGY AND RHINOLOGY
Gordon F. Harkness....Davenport, Iowa

PEDIATRICS
William Weston....Columbia, S. C.

EXPERIMENTAL MEDICINE AND THERAPEUTICS
Charles M. Gruber....Philadelphia

PATHOLOGY AND PHYSIOLOGY
L. W. Larson....Bismarck, N. D.

NERVOUS AND MENTAL DISEASES
Hans H. F. Reese....Madison, Wis.

DERMATOLOGY AND SYPHILOGY
Everett C. Fox....Dallas, Texas

PREVENTIVE AND INDUSTRIAL MEDICINE AND PUBLIC HEALTH
Stanley H. Osborn.....Hartford, Conn.

UROLOGY
J. J. Crane.....Los Angeles

ORTHOPEDIC SURGERY
Edward L. Compere.....Chicago

GASTRO-ENTEROLOGY AND PROCTOLOGY
Louis A. Buie.....Rochester, Minn.

RADIOLOGY
B. R. Kirklin.....Rochester, Minn.

ANESTHESIOLOGY
Edward B. Tuohy.....Washington, D. C.

GENERAL PRACTICE
Paul A. Davis.....Akron, Ohio

GOVERNMENT SERVICES

United States Army.....George E. Armstrong
United States Navy.....Joel T. Boone
United States Public Health Service.....W. Palmer Dearing
Veterans Administration.....E. H. Cushing

PERSONNEL OF REFERENCE COMMITTEES FOR THE WASHINGTON SESSION

SECTIONS AND SECTION WORK

William Weston, Chairman, Section on Pediatrics
Hans F. Reese, Section on Nervous and Mental Diseases
Jean Paul Pratt, Section on Obstetrics and Gynecology
Paul A. Davis, Section on General Practice
Gordon F. Harkness, Section on Laryngology, Otology and Rhinology

RULES AND ORDER OF BUSINESS

James Beebe, Chairman, Delaware
Jesse D. Hamer, Arizona
Peter J. DiNatale, New York
Clifford Sherburne, Ohio
James Stevenson, Oklahoma

REPORTS OF BOARD OF TRUSTEES AND SECRETARY

Creighton Barker, Chairman, Connecticut
Willis I. Lewis, Illinois
Thomas A. McGoldrick, New York
John W. Green, California
Arthur C. Scott, Jr., Texas

MEDICAL EDUCATION

Grover C. Pemberthy, Chairman, Section on Surgery, General and Abdominal
Charles L. Shafer, Pennsylvania
Henry B. Mulholland, Virginia
Ralph Todd, New York
Charles J. Kickham, Massachusetts

LEGISLATION AND PUBLIC RELATIONS

Howard Petry, Chairman, Pennsylvania
Rufus B. Robins, Arkansas
Samuel J. McClendon, California
Cyrus K. Sharp, Georgia
Clark Bailey, Kentucky

HYGIENE AND PUBLIC HEALTH

Stanley H. Osborn, Chairman, Section on Preventive and Industrial Medicine and Public Health
W. Palmer Dearing, U. S. Public Health Service
William A. Coventry, Minnesota
Robert E. Schleuter, Missouri
Frank M. Wiseley, Ohio

AMENDMENTS TO CONSTITUTION AND BY-LAWS

Floyd S. Winslow, Chairman, New York
B. E. Pickett, Sr., Texas
Karl S. J. Hohlen, Nebraska
Alfred S. Giordano, Indiana
H. Russell Brown, South Dakota

REPORTS OF OFFICERS

Charles H. Phifer, Chairman, Illinois
Harold B. Gardner, Pennsylvania
Robert B. Homan Jr., Texas
Allen H. Bunce, Georgia
Robertson Ward, California

CREDENTIALS

Hiram B. Everett, Chairman, Tennessee
Edward P. Flood, New York
Carl A. Lincke, Ohio
John F. Conway, New Mexico
G. Grady Dixon, North Carolina

INDUSTRIAL HEALTH

Donald Cass, Chairman, California
Homer L. Pearson Jr., Florida
Willis H. Huron, Michigan
Walter E. Vest, West Virginia
Earle M. Chapman, Massachusetts

EXECUTIVE SESSION

James P. Wall, Chairman, Mississippi
David B. Allman, New Jersey
Stephen R. Monteith, New York
Deering G. Smith, New Hampshire
Charles F. Strosnider, North Carolina

MISCELLANEOUS BUSINESS

L. S. McKittrick, Chairman, Massachusetts
George A. Unfug, Colorado
Bernard Klein, Illinois
Val H. Fuchs, Louisiana
Raymond F. Peterson, Montana

ORDER OF BUSINESS

(Subject to change by action of the House of Delegates)

TUESDAY, DECEMBER 6, 10 A. M.

1. Call to Order by the Speaker.
2. Preliminary Report of the Reference Committee on Credentials.
3. Roll Call.
4. Selection of Recipient of General Practitioner's Award.
5. Presentation, Correction and Adoption of Minutes of the Annual Session held in June, 1949.
6. Speaker's Remarks and Confirmation of Appointments to Reference Committees.
7. Address of President.
8. Introduction of President-Elect.
9. Report of Secretary.
10. Report of Board of Trustees, including reports of:
    (a) Council on Pharmacy and Chemistry.
    (b) Council on Physical Medicine and Rehabilitation.
    (c) Council on Foods and Nutrition.
    (d) Council on Industrial Health.
    (e) Council on National Emergency Medical Service.
    (f) Bureau of Health Education.
    (g) Bureau of Investigation.
    (h) Bureau of Legal Medicine and Legislation.
    (i) Bureau of Medical Economic Research.
    (j) Bureau of Exhibits.
    (See By-laws, Division Three, Chap. IX, Sec. 2 [B])

11. Reports of Standing and Special Committees:
    (1) Judicial Council.
    (2) Council on Medical Education and Hospitals.
    (3) Council on Scientific Assembly.
    (4) Council on Medical Service.
    (5) Special Committees.
12. Unfinished Business.
13. New Business.
14. Reports of Reference Committees.

2:30 P. M.

Time for introduction in executive session of resolutions dealing with private affairs of the Association.

THURSDAY, DECEMBER 8, 1:15 P. M.

1. Supplementary Report of Reference Committee on Credentials.
2. Reading and Adoption of Minutes.
3. New Business.
4. Executive Session.
5. Reports of Reference Committees and Other Unfinished Business.

REPORTS OF OFFICERS

REPORT OF THE SECRETARY

To the Members of the House of Delegates of the American Medical Association:

The Secretary respectfully submits the following annual report:

MEMBERSHIP AND FELLOWSHIP

On Sept. 1, 1949, the membership roster of the American Medical Association carried the names of 145,036 physicians, an increase of practically 5,000 members over the preceding year when the membership numbered 140,260, and an increase of nearly 10,000 over the membership on the same date in 1947. The Secretary submits that this really amazing growth in the short span of three years is indicative of the growing confidence of the rank and file of the medical profession of this country in the American Medical Association. It also reflects the agreement of the profession at large with the policies and efforts of the Association to preserve and defend the American way of free enterprise.

The number of Fellows of the Association has also shown a gratifying increase. There were 81,053 names on the Fellowship roster on Sept. 1, 1949, as compared with 77,816 on the same date in 1948 and 75,424 in 1947. Some of the increase in 1949 is accounted for by the inclusion of a few more than 2,000 names of physicians of the Veterans Administration who have been made Service Fellows in accordance with the recent amendment to the Constitution and By-Laws. In this connection, members of the House of Delegates may be interested to know that there are 6,765 Service Fellows, who are either commissioned medical officers of the United States Army, the United States Navy and the Public Health Service or permanent medical officers of the Veterans Administration.

The accompanying table shows the count of members and Fellows in the various states and territories and the number of component societies in each state.

ACTION ON MANDATES OF HOUSE OF DELEGATES

Actions of the House of Delegates at the Atlantic City Session in June which called for reference or correspondence by the Secretary have been taken care of as follows:

Amendments to the Constitution and By-Laws: The House of Delegates approved an amendment to the By-Laws, Division Three, Chapter XII, Section 6 (*A*) whereby the section was made to read ". . . the Secretary shall (*A*) keep minutes of the Proceedings of the House of Delegates, of the Judicial Council and of the Council on Scientific Assembly." The Secretary respectfully submits that the original wording of this portion of the By-Laws, namely "Keep minutes of the Proceedings of the House of Delegates and of the meetings of the Scientific Assembly" was correct in that the keeping

Organization of Constituent State and Territorial Medical Associations, Oct. 1, 1949

	Number of Counties in State	Number of Component Societies in State	No. of Counties in State Not Organized		No. of Members of State Associations		Number of Fellows in State, 1949
			1948	1949	1948	1949	
Alabama	67	67	..	..	1,823	1,738	722
Arizona	14	14	..	..	478	576	340
Arkansas	75	60	9	8	1,149	1,228	437
California	58	40	9	8	9,223	10,529	5,369
Colorado	63	27	1	1	1,373	1,422	777
Connecticut	8	8	..	..	2,348	2,496	1,449
Delaware	3	3	..	..	230	279	163
District of Columbia	..	..	..	..	1,218	1,384	810
Florida	67	33	16	17	1,775	1,693	1,159
Georgia	159	90	37	39	1,997	2,345	814
Idaho	44	9	..	1	322	394	150
Illinois	102	92	6	6	9,415	9,744	5,005
Indiana	92	81	1	1	3,777	3,771	1,753
Iowa	99	97	..	..	2,812	2,694	1,232
Kansas	105	74	15	15	1,894	1,841	908
Kentucky	120	108	3	4	1,864	1,892	877
Louisiana	64	42	17	15	1,767	1,839	883
Maine	16	15	..	..	754	798	386
Maryland	23	23	..	..	1,983	2,196	1,224
Massachusetts	13	13	..	..	6,167	6,466	3,267
Michigan	85	55	..	2	4,751	4,979	2,694
Minnesota	87	35	1	..	3,151	3,343	1,498
Mississippi	82	27	3	3	1,653	1,695	345
Missouri	114	74	7	9	3,564	3,683	1,771
Montana	56	18	21	20	431	471	250
Nebraska	93	50	16	16	1,163	1,173	744
Nevada	17	5	12	12	171	177	102
New Hampshire	10	10	..	..	568	600	313
New Jersey	21	21	..	..	4,825	5,300	3,618
New Mexico	31	14	17	17	295	327	205
New York	62	61	1	1	21,717	22,264	11,169
North Carolina	100	67	24	24	2,280	2,321	1,105
North Dakota	53	13	11	11	329	376	184
Ohio	88	88	1	..	7,214	7,373	4,008
Oklahoma	77	57	6	6	1,545	1,616	726
Oregon	36	27	1	1	1,210	1,259	649
Pennsylvania	67	60	5	7	10,750	11,038	6,981
Rhode Island	5	7	1	..	838	858	466
South Carolina	46	36	4	5	1,030	1,133	437
South Dakota	69	13	1	..	323	376	155
Tennessee	95	51	23	25	1,913	2,012	1,105
Texas	254	125	..	1	5,679	6,365	2,430
Utah	29	8	4	5	591	649	351
Vermont	14	10	3	3	398	414	225
Virginia	100	50	8	9	2,086	2,068	1,322
Washington	39	25	13	12	1,854	2,054	941
West Virginia	55	29	5	5	1,482	1,401	764
Wisconsin	71	52	..	..	2,854	2,913	1,441
Wyoming	24	11	11	11	184	201	129
Alaska	..	..	..	..	43	46	20
Hawaii	5	4	1	1	369	411	149
Isthmian Canal Zone	..	..	..	..	69	151	30
Philippine Islands	..	..	..	..	.....	.....	3
Puerto Rico	7	7	..	..	563	560	189
Foreign	..	..	..	..	.....	.....	169
Total	3,084	2,011	314	321	136,668	144,177	74,337
						Service Fellows	6,765
							81,102

of the minutes of the meetings of the Scientific Assembly covered the section meetings and other scientific meetings rather than merely the meetings of the Council on Scientific Assembly. It is recommended, therefore, that the House of Delegates take action to restore Division Three, Chapter XII, Section 6 (*A*) to its original wording.

The foregoing amendment and the other amendments to the By-Laws which were adopted at the Atlantic City Session have been incorporated in the Constitution and By-Laws that have been printed since the 1949 annual session.

Resolution on Child Health Programs on the State and Local Level: The attention of each constituent association was called by means of letters to the respective secretaries to this resolution, which favored "the development of sound child health programs on the state and local level by pediatric groups working in cooperation with the several state medical associations and local component county socieities."

Resolution on the Confidential Nature of Birth Records: These resolutions recommending that state legislatures and registration officials be urged to study carefully the publication entitled "The Confidential Nature of Birth Records" and, wherever possible, to put the recommendations contained therein into effect by enactment of laws or by administrative regulations, have been transmitted to each constituent association.

Resolution on Social Security: A copy of this resolution, which disapproved the extension of "social security" to self-employed individuals, including physicians and surgeons, was sent to each member of the United States Senate and House of Representatives.

Other resolutions were referred, as recommended in the reports of reference committees adopted by the House of Delegates, to the Council on Medical Education and Hospitals, the Judicial Council, the Council on Medical Service, the Council on National Emergency Medical Service and the Board of Trustees and undoubtedly will be reported on by those bodies.

Annual Conference of State Secretaries and Editors

The 1948 annual conference of secretaries and editors of state medical associations was held in November in St. Louis prior to the Interim Session. This was the first time in the long history of these conferences that one has been held outside of Chicago. An excellent program, prepared by a committee of members of the conference, was presented and many declared the meeting to be one of the most interesting yet held. However, the Secretary received a number of comments to the effect that the members preferred to come to Association headquarters for this conference, where they have opportunity to acquaint themselves with the work done there and with members of the staff. The 1949 conference is being held in the American Medical Association Building in Chicago.

Field Activity

During the past year the Secretary has responded to an increasing number of invitations to address or attend meetings of state and county medical societies throughout the country and meetings of a large number of other organizations having interests similar or allied to those of the American Medical Association.

The Assistant Secretary has also been increasingly in demand for similar activities.

Appreciation

The Secretary wishes to express his sincere appreciation for the aid and many courtesies that have been extended to him in all matters by the officers of the American Medical Association, the members of its House of Delegates, and the officers and members of state and county medical societies, as well as the loyal and efficient staff at the headquarters offices.

Respectfully submitted,

George F. Lull, *Secretary.*

REPORT OF THE BOARD OF TRUSTEES

To the Members of the House of Delegates of the American Medical Association:

The following annual report of the Board of Trustees is respectfully submitted:

Action on Resolutions or Reports Adopted by House of Delegates at Atlantic City Session

Certain resolutions and reports were referred to the Board of Trustees by the House of Delegates at the Atlantic City Session for consideration and possible action. The following report with respect to these matters is submitted:

Resolution on American Medical Association Assessment and Dues: An *ad hoc* committee on Constitution and By-Laws has been appointed to consider the Resolution on American Medical Association Assessment and Dues and other resolutions and recommend changes in the Constitution and By-Laws in the light of the provisions of the resolutions.

This Committee is now studying the question of permanent membership dues payable to the American Medical Association in view of the probability that the House of Delegates will wish to consider this problem at the December 1949 meeting of the House of Delegates. The final report of the Committee will not be available until just prior to the Clinical Session, but this preliminary report is included in the report of the Board of Trustees for the information of the members of the House in order that the complex questions involved may be noted.

At whatever level dues may be set, the chief problem is the technic of collecting them, whether directly by the American Medical Association from the active members or through the constituent medical associations or whether the dues should be collected from each constituent state and territorial medical association in proportion to the active paying membership of that association. The latter method would be consistent with the structure of the American Medical Association and, in addition, would eliminate the problems connected with the direct dues paying technic.

Resolutions on Single Membership Classification: The Committee on Constitution and By-Laws has reported to the Board of Trustees that it would be inadvisable to eliminate the Fellowship classification, which would be the case if the By-Laws were amended to encompass the objectives of these resolutions. The Board of Trustees has accepted the recommendation of the Committee.

Resolution on Questionnaire on Medical Care: It is the opinion of the Board of Trustees that it would be inexpedient at this time to send a questionnaire to all members and Fellows of the Association to learn their attitude relative to the various facets of medical care problems.

Resolution on Compulsory Health Measures: Copies of this resolution disapproving legislative proposals which would provide free diagnostic and therapeutic care for all school children of the United States were sent, together with the report of the Reference Committee and of the Board of Trustees, to the secretaries of all constituent state and territorial medical associations.

Resolution on Establishment of Committee on General Practice: In accordance with the recommendation contained in this resolution, the following Committee on General Practice, which will report directly to the House of Delegates, has been appointed:

Dr. Stanley R. Truman, Chairman

Dr. Paul A. Davis	Dr. George S. Klump
Dr. William L. Pressly	Dr. Joseph B. Copeland

Resolution on Establishment of Committee to Confer with Congress: This resolution recommended the appointment of a committee of leaders in the medical profession with a view

to developing legislation that would meet the objectives of the American Medical Association Program. The appointed committee is comprised of the following members:

Dr. Harvey B. Stone, Chairman

Dr. R. L. Sensenich	Dr. F. F. Borzell	
Dr. Louis H. Bauer	Dr. James R. McVay	
Dr. R. B. Robins	Dr. George F. Lull	ex officio
Dr. John W. Cline	Dr. E. L. Henderson	

Dr. Frank H. Lahey

Resolution on Hospital and Medical Care of Veterans for Non-Service-Connected Disabilities: The recommendations set forth in this resolution were given careful consideration by the Board of Trustees, and a Committee on Veterans Affairs has been appointed which will serve as a Committee of the Council on Medical Service.

Resolution on Medical Care and Health Plans: This resolution recommended that "the American Medical Association initiate under its own auspices a conference of representatives of all groups, medical and lay, with the purpose of forming a joint planning committee for the preparation of a truly comprehensive plan of curative and preventive medicine for the nation." Three preliminary conferences have been held with persons in high official position in five national organizations in the field of health and welfare and, while it is still too early for the presentation of any official statement from this group, the Board of Trustees is happy to report definite progress.

Resolution on Displaced Physicians and Resolution on Special Committee on Displaced Physicians: These resolutions were somewhat similar in content and one of them, as indicated, called for the appointment of a special committee to study the problems of displaced physicians generally. The membership of the appointed committee is as follows:

Dr. J. J. Moore, Chairman

Dr. Creighton Barker	Dr. Ernest B. Howard
Dr. Alex M. Burgess	Dr. George F. Lull

Dr. Jacob J. Golub

Report of Committee on Hospitals and the Practice of Medicine: Since the Atlantic City Session in June when the Report of the Committee on Hospitals and the Practice of Medicine as revised by the Reference Committee on Reports of Board of Trustees and Secretary was adopted by the House of Delegates, the Board of Trustees has given extended consideration to the positive recommendations made and the specific language in the report. An opinion was obtained from the Association's legal counsel, which reads in part as follows:

"I know that the said reference committee in presenting said Report and the House of Delegates in adopting it did not have a purpose of restraining, coercing or conspiring against, any hospital or institution, and merely meant to see to it that the members of the American Medical Association abide by the Principles of Medical Ethics of American Medical Association properly and lawfully construed and applied. There is, however, much language in said Report that could be seized upon by a person or party so disposed, in argument to court or jury, that it was the purpose of American Medical Association to unreasonably restrain, coerce or conspire against some particular hospital or institution and not merely to enforce the Principles of Medical Ethics of American Medical Association against the members of American Medical Association in a lawful manner and for a lawful purpose and not for the purpose of coercion or restraint.

". . . consideration should be given to the repealing by the House of Delegates of the Report of the reference committee of the House of Delegates on the report of Committee on Hospitals and the Practice of Medicine, by virtue of which an amended and revised Report was adopted by the House of Delegates on June 9, 1949."

The Board of Trustees feels that this legal opinion supports its own view that the action of the House of Delegates on the revised Report of the Committee on Hospitals and the Practice of Medicine is illegal and contrary to previous court decisions and also supports the Board's own opinion that to activate the recommendations of the Report would be unwise. The Board of Trustees therefore requests that the House of Delegates rescind at the earliest possible moment its adoption of the Report of the Committee on Hospitals and the Practice of Medicine as contained in the report of the reference committee.

Resolution on General Practice Sections in Hospitals: The following Resolution on General Practice Sections in Hospitals was presented to the House of Delegates in June 1949:

"*Resolved*, That the House of Delegates of the American Medical Association reaffirm its action of Dec. 10, 1946, concerning general practice sections making this action mandatory for such hospitals, with continued approval contingent on such action. . . ."

The Reference Committee on Miscellaneous Business reported on this resolution, and the report was adopted by the House, as follows:

"Your committee approves the principle of the resolution but does not believe it should be made mandatory."

Believing the purpose of this action to be of great importance and also believing that certain dangers were inherent in the wording of the resolution, the Board of Trustees requested an opinion from legal counsel as to whether or not this resolution was legally proper under the Constitution and By-Laws. The opinion of the Association's attorney was rendered, in part, as follows:

"In my opinion the resolution above quoted, if resolved and passed by the House of Delegates without deleting the word 'mandatory' would not have been legally proper."

With this opinion in hand, bearing out its own convictions, the Board of Trustees recommends that the House of Delegates take action at the December 1949 session and rescind the approval of the Resolution on General Practice Sections in Hospitals.

The Journal

THE JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION continues to mount in circulation, in value as an advertising medium and in readership as a professional medical publication. During 1949 the London correspondent who had held this position for more than forty years died; a new correspondent will be selected to supply a letter each week dealing with the affairs of medicine in Great Britain.

The Scientific Assembly of the American Medical Association has gradually added new sections, so that the number of such sections is almost double the number of twenty-five years ago. Each of these sections includes 20 to 30 papers in its program. Fifteen to 20 papers are also included in the General Meetings at the time of the Annual Session. In addition, a number of papers are read during the Clinical Session of the Association in midwinter. Between 2,000 and 2,500 papers are submitted voluntarily each year to THE JOURNAL. Thus it becomes necessary for the editor to read and either to accept or reject about 3,000 manuscripts each year.

Most of the important activities of the councils, bureaus and committees of the American Medical Association are given force and effectiveness through the pages of THE JOURNAL. The councils, bureaus and committees have multiplied, so that their number is about four times as many as it was twenty-five years ago.

Notwithstanding continuous increase in the size of THE JOURNAL, the publication of all official material has now become impossible. The size of THE JOURNAL is governed by the amount of material that can be made available to its readers each week and by the time available to the individual physician for reading and absorption of such material. The standard size of THE JOURNAL is 128 pages weekly, but many issues during the year exceed this figure, reaching in special issues as high as 220 pages. About 600 manuscripts can be published annually. Thus at least 2,400 of the manuscripts submitted

must be rejected with recommendations to publish in the specialty journals or elsewhere. The solution of this problem is difficult and is being given special consideration by the Board of Trustees.

With the retirement of Dr. Morris Fishbein it is contemplated that Dr. Austin Smith, Director of the Division of Therapy and Research, will become responsible for editing THE JOURNAL.

From Sept. 1, 1948, to Sept. 1, 1949, the weekly average of copies of THE JOURNAL printed was 137,013, which is a little more than 200 less than were printed in the preceding corresponding period. The mailing list of THE JOURNAL contained 136,950 names on Sept. 1, 1948, showing a decrease of 614 subscribers during the past year.

The fact that annual reports are now presented to the House of Delegates at the midwinter sessions necessitates a change in the time at which compilations are made in the subscription and circulation departments, so that it is not possible to present in this report the usual tables showing the approximate count of Fellows and subscribers on THE JOURNAL mailing list and the percentage of physicians receiving THE JOURNAL. That information will be available for the annual report next year.

Special Journals

The nine journals published by the American Medical Association devoted to the various specialties suffered a serious handicap during the recent strike of compositors and printers. As a result publications fell many months behind. Since that time special attention has been given to bringing these periodicals up to date. Much of the printing has been done by printers in Minneapolis and Memphis. When it became apparent that difficulties were developing, an intense drive was made to publish current issues and at the same time to make up the back issues that had been missed. At this time all the special journals are being published currently with the month of their dating. Subscriptions to practically all the special journals published by the American Medical Association have increased approximately 50 per cent during the past five years.

The *Archives of Surgery* has begun to be sought by more and more surgical organizations as an outlet for their transactions. At this time the Western Surgical Association, the Central Surgical Association and the Society of University Surgeons have adopted the *Archives of Surgery* as their official publication. The Board of Trustees therefore has approved a considerable increase in the size of the *Archives of Surgery* to meet this demand.

The *Archives of Internal Medicine* celebrated during 1949 the Centenary of the birth of William Osler. A special issue was published, which attracted worldwide attention.

The subscription prices of the special journals have not been increased over a considerable number of years. Their primary purpose is advancement of the specialties which they represent. Because of rapidly increased costs of labor and difficulty of publication, the Board of Trustees has now established new subscription rates for the special journals.

During 1949 publication of *Occupational Medicine* fell far behind. Through the efforts of the managing editor, arrangements were made to combine *Occupational Medicine* with the *Journal of Industrial Hygiene and Toxicology*. Beginning January 1950, the combined publication will appear monthly as the *Archives of Industrial Hygiene and Occupational Medicine*.

With the retirement of Dr. Fishbein as managing editor of the special journals, it is contemplated that Dr. Richard J. Plunkett will take over this position.

Standard Nomenclature of Diseases and Operations

The 1950 revision of the Standard Nomenclature of Diseases and Operations is now in full swing. Under the chairmanship of Dr. George Baehr, committees for all sections of the book have been established and are now functioning. Final reports of several committees have been rendered. The 1950 revision will include major changes in three of the categories, the Psychobiologic Unit, Diseases of the Hemic and Lymphatic Systems and Tumor Nomenclature. The revised Psychobiologic Unit will closely follow nomenclature standards of the American Psychiatric Association and those of the Joint Armed Forces Classification. Changes in the Hemic and Lymphatic section will follow recommendations made by the Committee for Clarification of the Nomenclature of Cells and Diseases of the Blood and Blood-Forming Organs. Revision of Tumor Nomenclature will follow patterns established by the Subcommittee on Oncology of the National Research Council.

The New Growth Section of the 1950 edition and the code for histological tumor types for the International List of Causes of Disease and Death of World Health Organization will be identical. The American Cancer Society will publish this classification of tumors in pamphlet form for the use of tumor registries and clinics. The preferred term will be listed in the classification. Synonyms will be listed under the preferred term in the Alphabetical Index.

The new revision will contain code numbers parenthetically of the International Statistical Classification of Diseases, Injuries and Causes of Death in the body of the book and a cross reference to these code numbers as an addendum.

According to present plans, the 1950 revision will be ready for distribution in the latter months of that year.

Hygeia

Hygeia, the Health Magazine, published by the American Medical Association, continues to maintain its importance as a force in the field of health education. More articles taken from *Hygeia* are copied, digested and abstracted in other publications reaching the public than from any other popular magazine. The publication has assumed special importance as a reference in the education of children in health. During the year a special department devoted to the health of the child has been established and a special section of questions and answers on this subject has been added.

The problem of maintaining advertising in *Hygeia* in a quantity sufficient to bear the costs of the publication has been exceedingly difficult. Various proposals have been made for periodical advertiser relationships in the way of service by the periodical to its advertisers, but thus far no definite plan has been developed. Circulation of *Hygeia* has reached the highest point in its history, but the maintenance of a large circulation without adequate advertising constitutes a considerable financial burden.

With the retirement of Dr. Morris Fishbein as editor of *Hygeia*, the periodical has been assigned to Dr. W. W. Bauer, Director of the Bureau of Health Education of the Association. Mr. Ellwood Douglass, Managing Editor, has been instrumental in improving the quality of the illustrations and the composition of this publication. The Kable Brothers Company, Mount Morris, Ill., has been the printer of *Hygeia* for the past two years.

CIRCULATION

The circulation of *Hygeia* today is about double what it was five years ago, but in 1948, as in 1947, the magazine showed a net loss financially. The average monthly net paid circulation in 1948 was 219,897 copies, as compared with 196,046 for the previous year. The subscription list to physicians increased in 1948 to 22,854, a gain of 4,260 subscribers over 1947.

Hygeia supplements the efforts not only of physicians but also of many allied agencies, such as state and city health departments, public and private nursing units and nurse training schools. One or more copies appear in practically every high school, college, university and public library in the country. For eight years the Division of Health Education of the Pennsylvania Department of Health has been sending the magazine to every high school in the state and to a number of parochial schools, a total of 1,497 subscriptions being distributed in this manner.

Through the assistance of the Woman's Auxiliary to the American Medical Association and the state medical association auxiliaries *Hygeia* is being sent to all state and federal legislators in the following states: Florida, Illinois, Indiana, Iowa,

Michigan, Minnesota, Ohio, Pennsylvania, Texas and Wisconsin. For more than a decade the Woman's Auxiliary to the American Medical Association has been an enthusiastic promoter of *Hygeia* by introducing it in schools, libraries, girls' clubs, YMCA's, Parent-Teacher Associations and mothers' clubs and throughout the local communities.

During the year *Hygeia* was exhibited at the Annual Session and the Interim Session of the American Medical Association, and at the meetings of the American Public Health Association, the National Education Association, the American Dental Association, the Chicago Medical Society and the Association of Secondary School Principals.

The net loss on *Hygeia* in 1948 was $62,556.41. *Hygeia* has been published for 26 years and has shown a total profit of $445,727.84 and a total loss of $370,224.83. This leaves a net gain of $75,503.01 through 1948.

Library

Two major changes in the Association's Library in the past year were the retirement of two members of the staff from key positions and the allotment of additional space for Library use.

Miss Harriet Wilson, reference librarian since 1923, retired on April 1, and Mrs. Marjorie Hutchins Moore, who came to the American Medical Association in 1920 and served as Librarian for almost twenty-five years, resigned on May 1. Miss Magdalene Freyder took over the duties of Librarian on Mrs. Moore's retirement.

Library service has been maintained at the usual level. During the year approximately 6,500 reference questions were answered. These required compiling 2,025 package libraries and considerable correspondence. There was a noticeable increase in inquiries by telephone, many of them with reference to material in the files of the "Quarterly Cumulative Index Medicus" because its publication has been so delayed. Requests for the loan of about ten thousand periodicals were filled by the periodical lending service. Appeals from foreign countries continue to arrive, and every attempt is made to supply reprints and tear sheets whenever they are available.

The Library has begun to receive a number of new periodicals, some as complimentary copies and others on exchange. There is an increasing demand for the latter arrangement, especially from foreign publishers.

Indexes for the three 1949 volumes of THE JOURNAL of the American Medical Association were prepared in the Library as usual. In September the Librarian served as consultant on an indexing project for two radiologic journals.

Quarterly Cumulative Index Medicus

Two volumes of the "Quarterly Cumulative Index Medicus" were printed in 1949, volume 42 (July-December, 1947) and volume 43 (January-June, 1948). Volume 44 (July-December, 1948) is in preparation, but will not be delivered to subscribers before next year. Since this still leaves the Index far behind schedule, certain steps have been taken with a view to speeding publication. During May, Mr. Ralph Shaw, Librarian of the United States Department of Agriculture, was called in as a consultant to survey the situation, and a number of his suggestions were adopted. It was decided to index periodicals on a current basis beginning with July 1949 (volume 46), leaving those received in the first half of the year as a backlog to be processed gradually. It is hoped that these plans will bring the Index back to its prewar publication schedule by 1952.

Report of Cooperative Medical Advertising Bureau

The Cooperative Medical Advertising Bureau continues to assist its present membership of 42 state medical associations through 34 state medical journals in securing advertising space sales and in servicing accounts by handling most of the details for the convenience of the journal offices.

Through its monthly bulletin, the Bureau offers helpful suggestions as well as current listings of products accepted by the Councils on Pharmacy and Chemistry, Physical Medicine and Rehabilitation and Foods and Nutrition and the Committee on Cosmetics. Acceptance of many products opens up an avenue of further prospects for the journals, all of which follow standards of advertising adopted for publications of the American Medical Association. It is, therefore, hoped to maintain present sales in subsequent years and even to increase them.

The net sales for the first nine months of the fiscal year, December 1948 through August 1949, amount to $434,659.16, as compared with $427,817.16 during the same period the preceding year. Because of regional schedules, a few of the journals gained in revenue. Some enjoyed approximately the same revenue, while a moderate loss was sustained by others. The general trend of loss of other so-called business papers runs 9 per cent (in pages) for the period January through August 1949.

The trend for the remaining three months of the present fiscal year indicates that the situation will improve. The estimated total for the full year is $589,129.42, as compared with $577,358.98 in 1948.

The Bureau, operating under the auspices of the Board of Trustees of the American Medical Association, functions in behalf of the state journal group, and all revenue is transmitted to the member journals, less operational costs, which amount to about 5.7 per cent. The Bureau is governed by the Advisory Committee which is composed of Drs. Stanley B. Weld, Connecticut, Chairman; L. Fernald Foster, Michigan; Julian P. Price, South Carolina; Carl B. Drake, Minnesota, and Walter E. Vest, West Virginia. Ex officio members of the Advisory Committee are Drs. George F. Lull, Morris Fishbein and Austin E. Smith and Mr. Alfred J. Jackson, Director of the Bureau.

Report of the Washington Office

All operations of the Washington Office are under the authority of the Board of Trustees. A legislative committee of the Board meets frequently and reviews all bills and other proposed national legislation presented to it by the Director. This Committee determines what actions are to be executed by the Washington Office staff in connection with specific legislative measures. The position of the American Medical Association on most bills can be readily stated based on standing policies. Some bills, however, require reference to the Board for extended study and advice, and some have to await fundamental policy making by the House of Delegates.

FUNCTIONS

The primary function of the Washington Office is that of an office of information. Since its authorization and establishment in 1944, the office has been charged with the responsibility of collecting and distributing information concerning federal legislation and the activities of federal departments of interest to the medical profession. In addition, it is an instrument through which the official opinions and views of the Association are made known to the Congress. This latter function has increased in importance and effectiveness during the past year. It has been, then, both a "watchdog" of Congress for the American Medical Association and a legislative office of advice and counsel to the Congress on behalf of the Association.

During the past year the Director has attended Board of Trustees meetings and meetings of the House of Delegates and its reference committees for advice on matters of national legislation. Physician members of the staff have visited state and county medical societies whenever possible to acquaint them with the Washington situation.

The work of the staff is coordinated for most effectively executing the authorized services of the office. Dr. Lawrence, the director, is responsible to the Board of Trustees for all activities and functions of the office and specifically maintains liaison with the United States Senate. Dr. Wilson is delegated as liaison with the House of Representatives and assists the Director as his deputy. Mr. Foristel, as legal advisor, analyzes all legislative matters and reports them for inclusion in the *Bulletin*. Mr. Perry, as Assistant to the Director, maintains liaison with the federal departments, and with clerical help is responsible for printing the *Bulletin*.

An additional staff member has been authorized.

SERVICES

To the Medical Profession.—Legislative measures introduced into the Congress are screened for their interest and relative importance to the profession. These bills and resolutions are quickly reported to the officials of the Association and to constituent societies through the *Bulletin* of this office. Actions taken by the Congress, including hearings and Congressional Committee reports, are also reported in either the *Bulletin* or *Comments* from this office.

A service of recognized value to representatives of the Association appearing at hearings is the orientation and counsel by the Washington Office staff prior to and during their mission at the Capitol.

Other services include: (*a*) the furnishing of bills, reports, public laws, government publications, etc., to members and non-members of the Association, (*b*) contact and liaison with associations and agencies to enlist and maintain their support for the Association's position on legislation and (*c*) furnishing speakers for professional and lay groups.

To the Congress and Other Branches of the Federal Government.—This office coordinates the timing and appearance of American Medical Association representatives with both Senate and House committees for hearings on medical and health legislation. This service to the Congress promotes efficiency in the presentation of official testimony giving the considered opinions of the Association, which is beneficial to members of Congress in their deliberations.

The office also renders service to individual Senators and Congressmen by furnishing them with basic informational material for speeches, interviews, discussions and questions. Congressional supporters and non-supporters of the Association's policy have made requests of this nature.

Departments of the National Military Establishment, the Federal Security Agency, Veterans Administration and other federal agencies maintain liaison with the office for interpretation of the Association's policies on legislation. This is likewise true of many national, professional, and non-professional organizations such as hospital and drug associations, labor unions, veterans' organizations and voluntary welfare agencies.

PUBLICATIONS

The Washington Office through its many contacts acquires factual information of importance to the medical profession. This information is written, edited and printed in the office and distributed without copyright to the profession through the *Bulletin*. This bulletin and *Comments* are published without schedule, depending on the information available for the timing of their issuance. The *Comments* is similar to the *Bulletin* except that it is more explanatory of legislative matters.

The mailing list for these publications consists of approximately 3,500 names, including officers, executive secretaries, and editors of state and county medical societies, and has been increased by over 1,000 names since the first of 1949. These publications are numbered consecutively beginning with each calendar year. There is an increasing tendency for state and local medical societies to use material from both the *Bulletin* and *Comments* in their journals.

The office printing equipment has been used in many instances to make additional copies of testimony required by congressional committees for members and the press. Seventy-five copies are usually required for this purpose. Additional copies of these complete statements are frequently sent out with the *Bulletin*.

GENERAL SERVICES

In addition to the foregoing, the Washington Office carries out special requests of the Board of Trustees pertaining to American Medical Association representation in Washington. Occasionally it becomes necessary to disseminate information to state associations faster than is possible through the *Bulletin*. Telephone and telegraph facilities are used for quick, direct action to alert state medical associations on changes in Congressional procedures occurring in major issues.

The 81st Congress has had submitted to it over 10,000 bills and resolutions. After screening these measures, this office has closely followed and reported over 300. To "follow" a bill means to analyze it in relation to American Medical Association policy and watch it through the various legislative processes, including personal attendance at hearings, until it becomes a law or is killed.

Each morning this office receives a report of all bills and resolutions introduced in both Houses on the preceding day. Those bills relating to public health, the practice of medicine, or of any other interest to the medical profession are selected to be followed. Inquiry is made of the introducer or his staff as to the reasons why it was introduced; whether it was introduced on behalf of himself or whether it was on the request of a constituent, another individual or an organization. This type of information often clarifies analysis of the bill.

The printed bill is available two days later and our legal advisor makes a careful study and analysis of it, after which it is reported in our *Bulletin*. It is ascertained from authoritative sources when hearings are to be held and this also is reported in the *Bulletin*. This information is immediately sent to the headquarters office in Chicago and the names of the persons who will be selected to testify are requested. Personal attendance at hearings allows the staff to be aware immediately of the testimony offered on the bills. During and subsequent to the hearings, we discuss with members of congressional committees the points on which testimony of other witnesses differs from that of our own. Following the termination of public hearings, the reference committee considers the bill in Executive Session, at which time the members determine whether the bill should be reported out of the committee or be killed. The decision of the committee is also reported in the *Bulletin*.

When a bill is reported out of a committee of the Senate, the Majority Policy Committee determines its relative importance to other legislation and places it on the Calendar of the Senate. When a major bill is reported out of a House committee, it goes to the Committee on Rules, which in a like manner places it on the Calendar of the House of Representatives. Prior to the time of debate on the floor of either House, the staff of the Washington Office discusses the bill's merits with leading Congressmen not on the original committee. After the bills are placed on the Calendar, many Congressmen request this office to provide specific information or data regarding the provisions of the bills so that they may be prepared to discuss these provisions in floor debate and to vote properly.

When the Senate and House versions of a bill differ, the two bills are referred to a Joint Conference Committee, composed of members from both Houses, to resolve the differences. In many instances our staff discusses the bill with members of this Committee.

Each congressional reference committee employs a research staff which studies all bills on which it is required to take action. This office is frequently called on by these staffs to provide needed information. The Congressional Library also supports a staff of research workers in health matters. It calls upon the Washington Office occasionally to assist in providing specific Congressmen with literature and data.

IMPORTANT LEGISLATION OF 1949

Of all the legislation followed by the Washington Office during 1949, the National Health Insurance bills (S. 1679, H. R. 4312 and H. R. 4313) were of the most concern. Hearings on these bills extended over a period of six weeks in the Senate Committee and seven weeks in the House, but both houses recessed hearings prior to adjournment, taking no definite action. The President's Reorganization Plan No. 1 was defeated by a vote of sixty to thirty-two in the Senate on August 16. This plan would have constituted the Federal Security Agency a Department of Welfare, making its present administrator Secretary with cabinet status.

Other important bills were: Aid to Medical Education (S. 1453 and H. R. 5940), which legislation obtained passage in the Senate and is being considered by the House Committee; Survey of Sickness in the United States (S. 2584) was passed by unanimous consent in the Senate and sent to the House; Hospital Construction Act Amendment (S. 614), which extends the duration of the Act for five additional years, increases federal funds available to $150,000,000 a year and raises the federal contribution, passed in the Senate on August 9—the House on October 3 passed the bill with minor changes and

returned it to the Senate for concurrence; Local Public Health Units (S. 522 and H. R. 5865) was passed in the Senate on August 27 and is being considered in the House by the Interstate and Foreign Commerce Committee; School Health Services (S. 1411) passed the Senate on April 29—the House Committee has not yet reported a bill on this subject, and National Science Foundation (S. 247 and H. R. 4846) passed the Senate on March 18—the House bill was reported by the Interstate and Foreign Commerce Committee on June 14 but has not yet received approval by the Rules Committee. A resolution was filed by Representative Crosser to discharge the bill from further consideration of that committee. Representative Crosser is at present in Europe. He may call up the resolution on his return.

Report of the Assistant to the General Manager Public Relations Department

The threefold purpose of the Public Relations Department has been greatly advanced during the past year. Substantial progress has been made along the entire front of (1) serving the national, state and local medical societies in solving public relations problems and conducting public relations programs, (2) maintaining and building good will for the medical profession and (3) utilizing to the fullest the power of public relations to advance the health and welfare of the American people.

MAGAZINE AND TRADE PAPER RELATIONS

The American family is rare that does not read at least one magazine, trade paper or house organ. Many families and individuals subscribe to more than one magazine and read more than one trade paper or house organ. To take greatest medical public relations advantage of these mass circulated, nationally distributed popular magazines and other publications, the public relations department established in April a Magazine Relations Division. The first activity of this division was to write all key magazine editors of the nation, advising them of this expanded service. They were offered fullest assistance in creating article ideas, setting up authoritative interviews, organizing research, compiling data, suggesting and arranging pictures, answering questions, correcting and revising manuscripts and correcting final proofs. Thus articles favorable to doctors and to the profession generally are much more likely to appear.

A case in point is the October 11 Look Magazine article "What Is the A.M.A.?" which consisted of six full pages of type and pictures, describing the functions of the American Medical Association, its achievements and its goals. Newstand sales of this particular issue of Look were promoted in every appropriate way and supplemented greatly the 18,500,000 established reader families of Look. More than 100,000 reprints were distributed by the American Medical Association, state and county medical societies and individual doctors.

The Magazine Relations Division during the past six months has contributed extensively to the preparation of additional articles favorable to the medical profession in *Popular Mechanics*, with a readership of 12,000,000; *This Week*, a magazine supplement in 23 metropolitan newspapers with a combined readership of 21,000,000; *Today's Woman*, readership 2,100,000; *Liberty Magazine*, readership 4,000,000, and *Coronet*, readership 5,000,000. All of these mass circulation magazines are high in praise of the enlarged American Medical Association service to them.

Trade papers read by key figures in commerce, business and industry; house organs circulating among employees in hundreds of corporations, businesses and institutions; fraternal publications, and others are being likewise extensively and intensively cultivated. One approach that is proving highly successful is the sending of the American Medical Association News weekly clipsheet to trade papers and house organs.

SECOND ANNUAL MEDICAL PUBLIC RELATIONS CONFERENCE

The first American Medical Association-sponsored National Medical Public Relations Conference held in St. Louis in 1948 was a complete success. The second annual conference is to be held in Chicago at Association Headquarters and at the Bismarck Hotel on November 5 and 6, 1949. State medical associations and county societies in metropolitan areas send over 200 key leaders to these conferences to exchange medical public relations ideas, obtain proved solutions to specific problems and increase liaison among doctors and laymen charged with medical public relations responsibilities. Thirty national allied health organizations have been sufficiently interested to send representatives, and members of the Board of Trustees and other officers of the Association have participated.

The Conference represents one of the most important activities of the Department of Public Relations in its being directly helpful in the implementation of public relations programs in the state medical associations.

SECRETARY'S LETTER

The Secretary's Letter continues to be an important channel of communication between the office of the Secretary and General Manager and the constituent state and component county medical societies. The Secretary of the Association directs this activity, which is channeled through the public relations department. Its value is attested by the constant flow of requests from medical leaders who ask to be put on the mailing list, which now totals more than 3,000 names.

The Secretary's Letter keeps medical society executives informed of the activities of the Officers and Trustees and the various councils, bureaus and committees of the American Medical Association and reports pertinent developments in the medical and allied fields. It is frequently used to inspire action on the part of the constituent and component societies and provides a continuous link between Association headquarters and leaders of the profession in all parts of the country.

PR DOCTOR AND EXCHANGE

The PR Doctor and Exchange continues to be welcomed enthusiastically by state and county medical societies. It is perhaps their principal means of acquainting themselves with what other states are doing in medical public relations programs. The sound and multiplied experience of forty-eight state medical associations is thereby made available to each state.

All members of the House of Delegates are kept abreast of medical public relations activities in the various states through the PR Doctor newsletter. The president, secretaries, public relations committee chairmen and auxiliary leaders of state medical associations and editors and allied leaders of national health organizations are likewise informed.

The headquarters offices of all state medical associations and of many county medical societies receive in addition the PR Exchange, which includes actual samples of medical public relations materials produced by state medical associations, county medical societies and the American Medical Association and many other samples of pertinent literature and material.

FIELD SERVICE

State medical associations are calling increasingly on the staff of the Department to address meetings, participate in special medical public relations conferences and confer and consult with officers and committees.

During 1949, the Department head, Mr. Lawrence W. Rember, addressed meetings of six state medical associations; conducted a round-table discussion on the public relations of the American Medical Association attended by all of the public relations directors of 23 organizations at Madison, Wis.; spoke to the national convention of the Medical Service Society of America at Tulsa, Okla., and conferred at various times with public relations committee chairmen and officers of a number of state associations. He addressed numerous meetings of national and state organizations of various sorts in all parts of the country.

During 1949 the Press Relations Director, Mr. John Bach, addressed doctor-newspaper-radio conferences sponsored by four state medical associations and directed press relations activities at the annual conventions of the General Federation of Women's Clubs and the National Medical Association. He

addressed numerous civic groups on socialized medicine at the invitation of county medical societies throughout the midwest area.

At all of these meetings and conferences the presence of staff members of the Public Relations Department has been praised.

PRESS RELATIONS

With the nation's newspapers, news magazines and radio news departments placing greater emphasis on advancements of medical progress, Press Relations has taken on increased importance in the Association's public relations program. This turn of events has produced an effective weapon in the campaign against nationalized medicine, because it stresses the positive side of medicine. Public attention has been focused on the fact that while death is eventual it has been postponed because doctors, working under a system of free enterprise, have developed and are constantly developing methods which reduce mortality and morbidity.

Press associations, newspapers and news magazines throughout the country have come to rely on the Press Relations Division of the American Medical Association for scientific and other facts pertaining to the affairs of medicine. Material which originates in Press Relations is accepted by editors as newsworthy and reliable. This is confirmed by the widespread use of the American Medical Association releases. Such confidence is the reward of years of service in the interest of truth in medical affairs.

A test of the efficiency and value of Press Relations came at the 1949 Atlantic City Session, perhaps the most important one in the annals of the Association. Sixty-five newspaper men and women covered the session and filed more than 350,000 words direct from the press rooms maintained in the Hotel Traymore, an all-time record. A large percentage of that wordage went over the wires of press services to every newspaper in the country and throughout the world. That means that millions of words concerning the activities of the medical profession flowed into newspaper offices for the duration of the five day session.

The Association's year round widespread activities in the interest of better health for the American people are publicized weekly through the American Medical Association News, which is distributed to more than 1,000 leading newspapers and magazines, press associations, radio networks, house organs and other mediums which have specifically requested it because of its news content. The weekly *News* condenses articles which appear in THE JOURNAL, the special journals, *Hygeia* and other publications of the Association and contains other medical and health material of public interest. Its acceptance is reflected in the usage made of the items not only on release dates but also in subsequent issues of newspapers when space permits. Clippings mentioning the American Medical Association and its activities run into the thousands yearly.

Special effort is made to see that every release goes to the home town newspapers of physicians mentioned therein. This service brings recognition of a physician in his community, and personalizes the Association. In addition, Press Relations is often called on to prepare and distribute special stories on the activities of the Association. Personal relationships have been built up with newspaper, magazine and radio editors and these contacts have proved invaluable in obtaining added consideration of releases.

Newspapers frequently issue special health and medical editions. These offer a splendid opportunity for a substantial volume of highly favorable news and feature material about the Association and the medical profession generally. To take full advantage of this opportunity and to stimulate more such editions, a special printed page entitled, "A.M.A. News Features," containing a variety of items on the activities of the Association was launched in July. This page of features was sent to all state and county medical society secretaries with a suggestion that local news angles be incorporated into the stories for use in area newspapers.

Press Relations many times anticipates news possibilities. A case in point was the distribution to newspapers, radio stations and press services of a warning which appeared in THE JOURNAL that babies might die from poisoning because of use of aniline dyes in diapers. Within a week an epidemic broke out in a Florida hospital which resulted in four deaths. The Association's warning was recalled in stories carried in newspapers and on the radio all over the country. This brought home most dramatically the American Medical Association's role in protecting the health of the American people.

SERVICES TO COUNCILS, BUREAUS AND COMMITTEES

The Public Relations Department is continuously serving all of the councils, bureaus and committees of the American Medical Association through the Secretary's Letter, the American Medical Association News clipsheet, magazines and films. Throughout the year, special occasions arise for telling the American people of the great value of the work done at Association Headquarters.

The Department provided extensive publicity in all mediums for The Ninth Annual Congress on Industrial Health; the Fourth Annual World Health Conference, the Conference on Sex Hormones and Breast Cancer, Conference of the Council on National Emergency Medical Service, Council on Medical Service action at the national Blue Shield meeting in Florida, the National Conference of County Medical Society Officers, National Conference of Physicians and Schools and a press conference on the return of Dr. W. W. Bauer, Director of the Bureau of Health Education, from his service in Germany.

WOMAN'S AUXILIARY

The Woman's Auxiliary to the American Medical Association and the state medical association auxiliaries can be of substantial value to the over-all, continuing public relations program of the medical profession. These groups want to help and the national Auxiliary is looking to Association headquarters for assistance and guidance.

A member of the staff of the Public Relations Department has been specifically assigned to work in close cooperation with the Assistant Secretary of the Association and the Executive Secretary of the Woman's Auxiliary in developing long range plans for assisting the national and state groups in every way possible.

The Department director and assistant director participated in a panel discussion at the convention meeting of Auxiliary public relations chairmen during the Atlantic City Session and the director talked on public relations before the state conventions of the Illinois and Iowa auxiliaries.

PUBLIC RELATIONS LIBRARY

In order to fill all requests for medical public relations information, one activity of the Department during 1949 was the setting up of a public relations library. This was done by an experienced editorial research worker, who collected and classified medical public relations pamphlets, newspaper clippings, advertisements and other background material. Increasingly, the public relations chairmen of county medical societies, as well as of state medical associations, are turning to the department for this service and assistance.

Report of the Council on Pharmacy and Chemistry

The Council on Pharmacy and Chemistry continued to expand its program to advance therapeutics. Additional emphasis was given to research in this field by association of the professional staff of the Council office with members of other scientific groups and by means of the standing committees of the Council maintained for this purpose.

The primary function of the Council, which is drug evaluation, expanded during the year to include consideration of an increasing number of therapeutic agents. The Council also formed a Committee on Toxicology to study medical problems related to the use of pesticides and other agents that may cause poisoning.

RESEARCH

Only a relatively brief review of the great diversity of the Council's work and the services for which it has come to be internationally recognized can be presented in this report, but the Council's research interests deserve special consideration. Research activities of the Council are formal and

informal. Through direct contacts with individual investigators, representatives of pharmaceutical industry and various scientific groups, the Council headquarters staff provides informal encouragement by conferences and other methods. The program of product evaluation also provides an effective method of encouraging the development of better drugs; application of the rules for acceptance alone serves as a stimulus for the study of new therapeutic agents. Research investigations are aided by the standing Committee on Therapeutic Research, which administers grants-in-aid for the study of basic problems in therapeutics, and by the Therapeutic Trials Committee, which sponsors collaborative clinical studies in the use of promising new drugs. Since the previous annual report, the Committee on Therapeutic Research has provided 21 grants-in-aid for experimental investigation of a variety of therapeutic problems. Several papers on the results of this research already have been published in scientific journals.

COMMITTEE ON THERAPEUTIC RESEARCH

The Committee on Therapeutic Research, a standing committee of the Council on Pharmacy and Chemistry, encourages scientific investigations in the field of therapeutics by providing funds for the prosecution of necessary research.

From Jan. 1 to Oct. 1, 1949, the Committee issued twenty-one grants. A detailed list of these grants, together with a list of publications during 1948, and of unexpended grants made before Jan. 1, 1949, is appended.

The following grants were issued before Jan. 1, 1949. In some cases an unexpended balance remains, or the work is not yet completed, or not yet published:

Grant 408: Ephraim Shorr, Cornell University Medical College, the effect of progesterone on the vaginal smear, $300.00.

Grant 454: W. L. Mendenhall and Albert J. Plummer, Boston University School of Medicine, the quantitative determination of theophylline, $50.00.

Grant 455: Frederick H. Pratt and Marion A. Reid, Boston University School of Medicine, the effect of cardiac drugs on the denervated lymphatic hearts, $100.00.

Grant 459: Mary E. O'Sullivan, Bellevue Hospital, New York City, the therapeutic effect of estradiol in muscular dystrophy, $100.00.

Grant 499: Joseph Litwins, New York Medical College, the chemistry and hematology of blood donors, $200.00.

Grant 506: Andrew F. Burton, Howard University School of Medicine, (1) the distribution of sulfanilamide in maternal and fetal tissues at various stages of pregnancy, (2) the toxic effects of quinine on the fetus in utero, $600.00.

Grant 514: Morton McCutcheon, University of Pennsylvania School of Medicine, the toxicity of sulfonamides and penicillin and the mechanism of chemotaxis in leukocytes, $150.00.

Grant 516: Nellie Perry Watts, Woman's Medical College of Pennsylvania, methods to prolong the action of local anesthetic drugs, $250.00.

Grant 525: Herbert Silvette, University of Virginia Medical School, the effect of low barometric pressures on kidneys previously damaged, either surgically or by drugs, $250.00.

Grant 533. Robert S. Teague, University of Alabama School of Medicine, the metabolism of diethylstilbestrol and its derivatives with emphasis on the ratio of absorption, the distribution, fate and excretion of these drugs, $500.00.

Grant 553: Adrian C. Kuyper, Wayne University College of Medicine, a procedure for the detection and determination of unidentified plasma constituents, $375.00.

Grant 561: G. L. Cantoni, Long Island College of Medicine, the mechanism whereby potassium exerts its effect on the intact smooth muscle, $400.00.

Grant 569: Samuel L. Saltzman and Charles Haig, New York Medical College, the therapy of retinitis pigmentosa, $500.00.

Grant 570: F. William Sunderman, University of Pennsylvania School of Medicine, the use of congo red in measuring serum volume and in detecting amyloidosis, $400.00.

Grant 572: C. H. Werkman, Iowa State College Department of Bacteriology, the mechanism of action of penicillin and streptomycin, $1,000.00.

Grant 575: Tom Addis, E. Barrett, L. J. Poo, L. Way and W. Yuen, Stanford University School of Medicine, reasons for the differences in the effects of various proteins on the rate of growth of the kidney, $1,000.00.

Grant 582: Allan D. Bass, Syracuse University College of Medicine, vascular disease and hypertension, $500.00.

Grant 583: Paul J. Hanzlik and R. H. Dreisbach, Stanford University School of Medicine, the intravenous use of quinine, $200.00.

Grant 585: Maria Wiener Kirber, Woman's Medical College of Pennsylvania, and Werner Henle, University of Pennsylvania School of Medicine, the complement fixation reaction in epidemic influenza, $350.00.

Grant 586: Harold D. Green, Wake Forest College, Bowman Gray School of Medicine, the role of the liver and kidneys in shock, $500.00.

Grant 587: Richard C. de Bodo, New York University College of Medicine, the antidiuretic action of some depressants of the central nervous system, $500.00.

Grant 588: Richard C. de Bodo, New York University College of Medicine, the role of gluconeogenesis and carbohydrate utilization in insulin hypersensitivity, $500.00.

Grant 591: Gregory Pincus, Worcester Foundation for Experimental Biology, the mechanism of action of gonadotropin, $2,400.00.

Grant 593: Robert Chambers, New York University College of Medicine, capillary fragility, $500.00.

Grant 594: Windsor C. Cutting, Stanford University School of Medicine, chemotherapy of virus infections, $500.00.

Grant 595: J. Murray Luck, Stanford University School of Medicine, the use of low-salt human serum albumin for the relief of hypoproteinemia and edema, $500.00.

Grant 599: David F. Marsh and Clark K. Sleeth, West Virginia University School of Medicine, the quantitative aspects of the well known tachyphylaxis that occurs with repeated administration of such drugs as amphetamine, ephedrine, tuamine, and propadrine, $400.00.

Grant 601: Edmond J. Farris and Boland Hughes, The Wistar Institute of Anatomy and Biology, characteristics of semen in fertile and infertile men, $1,000.00.

Grant 602: A. C. Ivy, University of Illinois College of Medicine, the alleged sterilizing action of the expressed juice of Caladium seguinum (Malaya), $450.00.

Grant 603: Joseph H. Cort, Yale University School of Medicine, the effects of chronic stimulation of the autonomic nervous system of normal unanesthetized animals, $500.00.

Grant 604: E. M. K. Geiling, B. J. McIntosh, A. Ganz, L. Brimmer and F. E. Kelsey, The University of Chicago School of Medicine, biosynthesis of important pharmacological drugs, $200.00.

Grant 605: R. H. Dreisbach and Go Lu, Stanford University School of Medicine, vasomotor reactions of circulatory depressants, $300.00.

Grant 606: Harald Holck, University of Nebraska College of Pharmacy, delayed death in rats following administration of nostal,® $250.00.

Grant 607: Boyd Houchin, University of Louisville School of Medicine, the qualitative estimation and differentiation of tocopherols in blood of patients with congestive heart disease before and after the parenteral administration of dl-alpha-tocopheryl phosphate, $200.00.

Grant 608: Otto Krayer, Harvard Medical College, the therapeutic action of Sb-containing substances against the poisonous effect upon the circulatory system of bismuth compounds, especially sodium bismuth tartrate, $500.00.

Grant 609: Clinton H. Thienes, University of Southern California School of Medicine, the effect of cholinergic anti-cholinergic and other relative drugs on vacuole formation in exocrine cells of the pancreas, $150.00.

Grant 610: Burnham S. Walker and Norwood K. Schaffer, Boston University School of Medicine, improved analytical methods for the measurement of blood levels of urethane, $500.00.

Grant 611: Sidney Werner and Edith Quimby, Columbia University College of Physicians and Surgeons, the use of radio-active iodine in the treatment of toxic goiter, $500.00.

Grant 612: J. Lerman, Massachusetts General Hospital, therapeutics of hyperthyroidism, $500.00.

Grant 613: Eugene P. Pendergrass and Harry P. Schenck, University of Pennsylvania School of Medicine, the effects of radiation upon the lymphoid tissue of the human nasopharynx, $400.00.

Grant 614: Richard C. de Bodo, New York University College of Medicine, the mechanism of insulin hypersensitivity, $500.00.

Grant 616: Alice Dorfman, University of Chicago School of Medicine, the several basic components of the plasma of sick children, $350.00.

Grant 617: Ralph G. Janes, The State University of Iowa College of Medicine, the action of nicotinic acid, nicotinamide and the alcohol of niacin on certain phases of fat and carbohydrate metabolism in the diabetic rat, $400.00.

Grant 618: T. T. Chen, State Teachers College, Bemidji, Minnesota, an antibiotic substance which may have therapeutic value with respect to protozoan diseases, $500.00.

Grant 619: E. K. Marshall, Jr., The Johns Hopkins University School of Medicine, quinoline compounds which appear to have an action directly upon the kidney similar to that exhibited by posterior pituitary extract, $500.00.

Grant 620: L. M. N. Bach, The Tulane University of Louisiana School of Medicine, the effect of the antidiuretic hormone on the oxygen consumption of the kidney, $350.00.

Grant 622: Lester M. Morrison, College of Medical Evangelists, Los Angeles, the role of lipoid metabolism in the pathogenesis of coronary artery thrombosis and in atherosclerosis of human subjects, $750.00.

The following grants have been issued since Jan. 1, 1949:

Grant 623: R. P. Ahlquist, University of Georgia School of Medicine, a pharmacological study of the nucleosides, $200.00.

Grant 624: S. W. Clausen, University of Rochester School of Medicine, the influence of coconut milk upon the growth and utilization of vitamin A by the rat, $263.00.

Grant 625: Harald Holck, University of Nebraska College of Pharmacy, tolerance and cross-tolerance to nostal,® $250.00.

Grant 626: David Fielding Marsh, West Virginia University School of Medicine, comparative pharmacology of the isomeric heptylamines, $200.00.

Grant 627: Janet W. McArthur, Massachusetts General Hospital, adrenal cortical function in diabetic acidosis, $500.00.

Grant 628: James M. Orten, Wayne University College of Medicine, relation of citric acid and related organic acids to carbohydrate metabolism, particularly in experimental diabetes, $350.00.

Grant 629: Isaac Starr, University of Pennsylvania School of Medicine, standardization of the ballistocardiogram, $500.00.

Grant 630: Marshall R. Warren, University of Tennessee School of Medicine, possible dangers pursuant to indiscriminate use of irritating substances for intramuscular injection, $250.00.

Grant 631: C. P. Kraatz, Jefferson Medical College of Philadelphia, to determine in dogs whether pyridoxine will antagonize the vomiting induced by various types of drug stimulation, $300.00.

Grant 632: E. B. Carmichael, Medical College of Alabama, meperdine hydrochloride, $500.00.

Grant 633: Allan D. Bass, Syracuse University College of Medicine, relationship of sulfonamides to fetal development, $500.00.

Grant 634: M. H. F. Friedman, Jefferson Medical College of Philadelphia, experimental therapy of nonspecific ulcerative colitis, $500.00.

Grant 635: J. Maxwell Little, Wake Forest College, Bowman Gray School of Medicine, heat lability of the diuretic factor present in dialyzed human urine, $500.00.

Grant 636: R. R. Overman, University of Tennessee School of Medicine, the mechanisms of ionic imbalance in malaria and associated pathophysiological states, $500.00.

Grant 637: George P. Child, Albany Medical College, the mechanism of action of local anesthetics in the symptomatic treatment of peptic ulcer and related conditions, $500.00.

Grant 638: A. H. Schein, University of Vermont College of Medicine, uric acid levels in human beings, $500.00.

Grant 639: Peter Talso, University of Chicago Department of Medicine, mechanism of the excretion of lithium in dogs, $175.00.

Grant 640: Robert Elman, Barnes Hospital, St. Louis, further development of a flame photometer, $500.00.

Grant 641: Joseph B. Kirsner, Walter L. Palmer and William E. Ricketts, University of Chicago School of Medicine, hepatic disease, $500.00.

Grant 642: Robert C. Lowe, University of Oklahoma School of Medicine, hepatic metabolism, $500.00.

Grant 643: David Lehr, New York Medical College, triple sulfonamide mixtures, $500.00.

Following is a list of the investigations conducted with the assistance of grants made by the Committee on Therapeutic Research, reports of which were published during 1948:

Werner, S. C.; Quimby, E. H., and Schmidt, C.: The Clinical Use of Radioactive Iodine, Bull. New York Acad. Med. **24**: 549 (Sept.) 1948; Clinical Experience in Diagnosis and Treatment of Thyroid Disorders with Radioactive Iodine (Eight-Day Half-Life), Radiology **51**: 564 (Oct.) 1948.

Cutting, W. C.; Dreisbach, R. H., and Neff, B. J.: Antiviral Chemotherapy: Further Trials, Stanford M. Bull. **6**: 481 (Nov.) 1948.

Sevag, M. C., and Miller, R. E.: Studies on the Effect of Immune Reactions on the Metabolism of Bacteria: I. Methods and Results with Eberthella Typhosa, J. Bact. **55**: 381 (March) 1948.

Moraczewski, S. A., and Kelsey, F. E.: Distribution and Rate of Metabolism of Phosphorus Compounds in Trypanosoma Equiperdum, J. Infect. Dis. **82**: 45 (Jan.-Feb.) 1948.

Zierler, K. L.; Grob, D., and Lilienthal, J. L., Jr.: On the Antithrombic and Antiproteolytic Activity of Alpha Tocopheryl Phosphate, Am. J. Physiol. **153**: 127 (April) 1948.

Krayer, O., and Farah, A.: Action of Cysteine and of Dimercaptopropanol in Heart Failure Caused by Sodium Bismuth Tartrate, Federation Proc. **7**: 235 (March) 1948.

Kligman, A. M., and Rosenzweig, W.: A Simple Quantitative Method for the Laboratory Assay of Fungicides, J. Invest. Dermat. **10**: 51 (Feb.) 1948; Studies With New Fungistatic Agents. I. For the Treatment of Superficial Mycoses, ibid. **10**: 59 (Feb.) 1948.

Bakst, H.; Kissin, M.; Leibovitz, S., and Rindler, S.: The Effect of Intravenous Aminophylline on the Capacity for Effort Without Pain in Patients with Angina of Effort, Am. Heart J. **35**: 527 (Oct.) 1948.

Morrison, L. M.; Chaney, A. L., and Hall, L.: Cholesterol Metabolism in Acute Coronary Thrombosis, Am. J. M. Sc. **216**: 32 (July) 1948.

Morrison, L. M., and Rossi, A.: Absorption of Experimental Atherosclerosis by Choline, Proc. Soc. Exper. Biol. & Med. **69**: 283 (Nov.) 1948.

Weissberg, J., and McGavack, T. H.: Inulin Clearance in the Altered Endocrine State, New York State J. Med. **48**: 2615 (Dec.) 1948.

Logsdon, C. L., and McGavack, T. H.: Death Probably Due to Potassium Deficiency Following Control of Diabetic Coma, J. Clin. Endocrinol. **8**: 658 (Aug.) 1948.

McFee, R.: A Critical Discussion of the Bioelectric "Doublet" Theory, Federation Proc. **7**: 79 (March) 1948.

Marsh, D. F.: The Comparative Pharmacology of the Isomeric Heptylamines, J. Pharmacol. & Exper. Therap. **94**: 225 (Nov.) 1948.

Wertenberger, G. E., and Haffrebring, R.: The Effect of Serum Hypersensitivity Reactions upon the Electrocardiogram, Federation Proc. **7**: 132 (March) 1948.

Farris, E. J.: Motile Spermatozoa as an Index of Fertility in Man, Anat. Rec. **101**: 593 (Aug.) 1948.

Ross, V.: Preparation of Diphtheria Toxin Solution Requiring No Control in the Schick Test, J. Immunol. **59**: 207 (June) 1948.

Bucher, G. R., and Anderson, A.: The Uropepsin Output in Cats Given Histamine-Caffeine in Beeswax, Federation Proc. **7**: 16 (March) 1948; Uropepsin Output in Cats Treated with Caffeine and Histamine, Am. J. Physiol. **153**: 454 (June) 1948.

THERAPEUTIC TRIALS COMMITTEE

During the year, the Therapeutic Trials Committee completed consideration of the methods of clinical investigation and evaluation of moist heat in poliomyelitis and rendered a full report to the National Foundation for Infantile Paralysis, which had originally requested advice on this matter. In its deliberations, a subcommittee developed certain general principles applicable to the evaluation of any agent proposed for the treatment of poliomyelitis. These were formulated into a comprehensive report and have been published in THE JOURNAL under the auspices of the Council.

In conjunction with the Council on Industrial Health, the Committee completed a survey of aluminum treatment and prophylaxis of silicosis and collaborated with the Council on Industrial Health and the Council on Pharmacy and Chemistry in preparing and publishing a critical report on this subject.

The investigation of chlorophyll preparations in wound healing, conducted under the auspices of the Committee by Dr. I. S. Ravdin and his associates was completed and the results were published as a report to the Council on Pharmacy and Chemistry. An investigation of isopropylarterenol in bronchial asthma was undertaken by Dr. Leslie N. Gay, and the results have been published. This work aided the Council in reaching a decision to accept the drug for inclusion in New and Nonofficial Remedies.

The Committee has sponsored the preparation and publication of a report on statistical methods by Dr. H. M. C. Luykx and a series of reports on methods of evaluation of narcotic and analgesic drugs by Drs. Jane Denton and Henry K. Beecher.

Progress reports on the use of methylcellulose in chronic constipation, streptomycin in granuloma inguinale, and on adjusted ophthalmic solutions have been received and the work on these problems is continuing under the auspices of the Committee.

In April the Committee held a four day meeting of all investigators participating in the Collaborative Study of Estrogens and Androgens in Mammary Cancer. More than eighty scientists participated in these meetings, and future studies were planned. A brief summary of the data obtained to date has been published, and the complete proceedings of the Conference are now available in a paper-covered book which may be obtained at a nominal charge by workers in this field.

The investigations on steroid hormones in mammary cancer are proceeding at an accelerated pace. Records on nearly 1,000 cases of breast cancer have been submitted to the Committee, and these are being analyzed and the medical profession is being kept informed of the progress of this study at frequent intervals. A preliminary survey of the accumulated specimens submitted by participating investigators was undertaken by the Committee's consultants on Pathology and Radiology at the Armed Forces Institute of Pathology, and a complete review of this material is planned for the near future.

Among new projects commenced this year under Committee auspices is an investigation of khellinin and visammin in cardiovascular conditions. This work has just started and results for reporting are not expected until next year.

PUBLICATIONS AND REPORTS

The Council continued the publication of its annual volume, New and Nonofficial Remedies, in which are described the drugs accepted by the Council. New and Nonofficial Remedies and its companion books, Useful Drugs and the Epitome of the U. S. P. and N. F., are printed and distributed by the J. B. Lippincott Company under an arrangement begun in 1947 to meet the demand for these volumes. "N. N. R." is widely recognized as a standard of reference for nonofficial drugs and thus takes its place with the "official" publications of the country, The United States Pharmacopoeia and The National Formulary. "N. N. R." provides statements of actions and uses for many "official" drugs, but the Epitome of the U. S. P. and N. F. supplies brief information on the actions, uses and dosage of all "official" preparations. Useful Drugs offers a selective list of the most important drugs from all three sources.

Since its last annual report, the Council has implemented its policy to exclude from N. N. R. those "official" drugs and preparations of such drugs which have been included in either the U. S. P. or N. F. for more than twenty years. This policy is based on the assumption that the therapeutic uses and properties of such articles can be expected to be well known after such a period of "official" recognition. By this step, the Council hopes to place more emphasis on the dissemination of knowledge of less well established therapeutic agents.

Plans are under way to revise the Council's other book publication, Glandular Physiology and Therapy. Revision of Useful Drugs is planned for next year. Revision of the Epitome of the U. S. P. and N. F. is made as those "official" publications are revised. Since the last report, the Council office staff in collaboration with other agencies of the American Medical Association assisted in the revision and editing of the American Medical Association "Intern's Manual," now printed by arrangement with W. B. Saunders Company. It is also exploring the

V 1
194

possibility of revising "Fundamentals of Anesthesia" which has been out of print for several years.

During the year the Council issued numerous reports for publication in THE JOURNAL, which include those made to the Council by the Therapeutic Trials Committee and by outside investigators whose work was either encouraged or sponsored directly by the Council. The Council continued to issue informative reports concerning products which are exploited with unwarranted claims to the medical profession. All published reports are reprinted annually in the Annual Reprint of the Reports of the Council.

EVALUATION OF DRUGS FOR ACCEPTANCE

During the year the facilities for handling the drug acceptance program have increased sufficiently to permit even more rapid handling of drug products submitted to the Council for consideration. The Council maintains a standing Committee on Nomenclature to facilitate consideration of trade names under the Council Rules and has recently authorized members of that committee to pass on such names without full Council consideration as a means of expediting action on therapeutic preparations. The Council office makes increasing use of a large number of expert consultants in the various fields of therapeutics to provide members of the Council with a concensus when the Council is considering acceptance or rejection of drug preparations. This lessens the time required for deliberation and provides promptly the necessary information on new therapeutic agents.

Since the last annual report, the Council considered 289 presentations on drug products, of which 49 represented new therapeutic agents. The over-all figure shows an increase over the previous year, but there were ten fewer new drugs involved.

The Council has abandoned its previous policy of reconsidering each accepted product at the end of every three year period, because this practice has been obviated through a more complete annual revision of New and Nonofficial Remedies. However, the Council reviews from time to time the status of groups of drugs and eliminates or retains these agents in accordance with current medical opinion.

JOINT COMMITTEE ON PESTICIDES

The Council has formed a standing Committee on Toxicology which includes a subcommittee designated as the Joint Committee on Pesticides. The latter was organized to investigate the medical problems peculiar to the use of insecticides, rodenticides and other agricultural chemicals employed for the destruction of crop and household pests. The broader aspects of the problem involve possible contamination of food during production, the precautions required to avoid deleterious effects to handlers of the toxic agents and methods for treatment of poisoning from them when this occurs. A conference to discuss the various problems involved was sponsored by the Council during the past year. It is planned to hold another meeting, at which time it is hoped to develop other phases of a program to consider pesticides and other toxicologic agents of medical interest.

MEETINGS

In addition to the meetings of its various committees, the Council holds during each calendar year an annual meeting to review general scientific problems of fundamental importance to therapeutics, to consider modifications or extensions in its procedure and to receive reports from its various standing committees. The consideration of products, publications, reports and other regular activities is conducted by means of a biweekly bulletin.

COLLABORATION

The Council maintains liaison with other scientific groups to exchange technical information. It is represented at many important meetings of other agencies and organizations. Several such contacts were effected during the past year by members of the Council and professional members of its headquarters staff.

Information is regularly exchanged between the revision committees of the U. S. Pharmacopeia and the National Formulary, the Food and Drug Administration, the United States Public Health Service and the Veterans Administration. The Council office also maintains a list of organizations to which lists of recently accepted drug products are regularly sent and has recently entered into agreement with another, the Joint Scandinavian Pharmacopeial Commission, to exchange information concerning the nomenclature on new drugs.

EXHIBITS

The Council office occasionally assists in the preparation of scientific exhibits on topics pertaining to the diagnosis, prevention or treatment of disease through the use of medicinal agents. Since the last report, five such exhibits, for which the Council is responsible, were displayed at meetings where they had not previously been shown. This represents a slight reduction from the number of displays made the previous year. As time and funds permit, new exhibits of scientific interest are planned for the future. This is considered an important adjunct for the dissemination of therapeutic knowledge in addition to the books and reports published under the supervision of the Council.

COUNCIL OFFICE STAFF

During the year the headquarters staff was enlarged to add a full time bacteriologist to act in an advisory capacity for the consideration of antiseptics and biologic preparations, and a full time physician with clinical experience in endocrinology and venereal diseases to aid in the consideration of therapeutic agents in these fields.

The Council office continues to maintain a supporting office staff commensurate with the needs for administration of the Council files, correspondence and publications. The loyalty of these persons is largely responsible for the efficient manner in which the work at headquarters has progressed.

The professional members of the headquarters staff continued to provide their services as speakers before interested groups as a means of increasing the understanding and knowledge of the work of the American Medical Association, the Council and other subjects of general interest. Many such appearances were made during the past year by the Secretary and other members of the professional staff.

APPRECIATION

The Council wishes to express its appreciation to all other offices at the headquarters of the Association, to the Board of Trustees and other officers of the Association for their thoughtful consideration and cooperation, and also to other agencies and individuals whose assistance has been helpful in maintaining and extending many of the Council activities.

Committee on Scientific Research

On Dec. 31, 1948, the Committee on Scientific Research of the American Medical Association went out of existence, bringing to a close forty-eight years of active work in the distribution of funds appropriated each year by the Association in support of research on concrete scientific problems. The Committee was created in 1900, and the Board of Trustees was instructed at that time to set aside the sum of $500 annually for the work to be done, the sum to be increased in the future to as great extent as possible. During the intervening years the Committee has issued a total of 742 grants, in most cases in sums of $500 or less.

During 1948 sixteen grants were issued for a total of $13,881, and work is still in progress on twenty-seven grants issued previous to 1948. All of the records pertaining to these studies, as well as the historical records, have been transferred by the Chairman of the Committee to the office of the Council on Pharmacy and Chemistry. The Council office is maintaining open files on the unfinished business of this Committee and will continue to keep records on the progress and completion of the studies for which grants were issued.

The Board of Trustees wishes to offer at this time an expression of sincere appreciation for the service rendered by the Committee on Scientific Research and particularly by its Chairman, Dr. Ludvig Hektoen of Chicago, who has served in that capacity for many years.

Report of the Laboratory

Because it was understaffed during and immediately after the war, the Laboratory had to curtail many of its services to physicians and concentrate on its primary function, the examination of products submitted to the Council on Pharmacy and Chemistry. The great increase in the number of drugs submitted within the last few years required a larger laboratory staff to maintain the schedule of work. During the past year, the Laboratory acquired its full complement of eight chemists. Several functions soon will be resumed, and the Laboratory's services to physicians will be expanded.

WORK FOR THE COUNCIL ON PHARMACY AND CHEMISTRY

The increase in personnel, space and equipment is reflected in the increased number of products examined during the past year. Over 300 individual preparations referred to the Laboratory by the Council on Pharmacy and Chemistry were examined. Of these, 44 were products for which tests and standards had to be developed.

In the past the Laboratory has examined periodically products obtained from the open market. While this has been done to some extent in the past year, it will be done regularly in the future.

The Laboratory has aided the Council on Pharmacy and Chemistry in the preparation of statements of a chemical nature and in matters of nomenclature for new monographs which are prepared for publication.

With the establishment and operation of the Council on Pharmacy and Chemistry's Committee on Cosmetics, the Laboratory expanded its facilities and program of examination to include cosmetics. Several cosmetic preparations and appliances already have been examined.

WORK FOR OTHER DEPARTMENTS OF THE ASSOCIATION

The Laboratory devoted much time to work for other departments at headquarters. It was frequently called on to review critically articles and pamphlets of a chemical nature concerning products of doubtful medicinal value on which the Bureau of Investigation reports to the physician in columns of THE JOURNAL. Analytical studies were made on preparations such as "Imdrin" and Hoxsey's "cancer cures" and the results reported to the Bureau.

It was often requested to check the accuracy of the chemical statements and nomenclature in articles presented for publication in the periodicals of the American Medical Association.

Several determinations of vitamin D_2 products were made for the Council on Foods and Nutrition.

During the past year the Association's Advertising Committee often has called on the Laboratory to consider chemical claims advanced in advertising copy. A decision on these matters frequently has required extensive Laboratory examination of properties of drugs and study of apparatus.

The reference library used by the Division of Therapy and Research is supervised and maintained by the Laboratory.

SPECIAL PROBLEMS

In many instances the therapeutic value of a drug depends on the determination of unknown facts or clarification of ill-defined facts, as for example, the suitability of penicillin powders for inhalation submitted for Council consideration depended on the particle size of the powders. Examination of the powders in the Laboratory brought out several contradictory factors which have been called to the attention of the pharmaceutical houses concerned.

An extensive examination of antacids is in progress in an attempt to provide methods of in vitro evaluation.

When the early reports from physicians concerning the effects of lithium compounds as salt substitutes were received, the Laboratory immediately carried out analyses. The results subsequently were published in THE JOURNAL with a description of the general chemical and physical properties of lithium compounds.

Much of any chemical work that is not strictly routine demands development of special methods and apparatus. The ingenuity of members of the Laboratory staff was shown on many occasions by the development of necessary apparatus. Newer technics reported in the chemical literature for separating or analyzing organic compounds are constantly being studied and applied to the examination of pharmaceuticals.

OTHER ACTIVITIES

During the past year the Laboratory has cooperated with other organizations interested in the development and maintenance of standards for pharmaceutical products. At the request of the Food and Drug Administration Laboratories, the Laboratory of the American Medical Association took part in a collaborative study on a new procedure developed by the Food and Drug Administration for the chemical assay of estrogens. The Veterans' Administration requested the Laboratory to establish tests and standards on an important drug for which none were available. A spectrophotometric study on several drugs was begun in cooperation with the Laboratory of the American Dental Association. In addition there is a constant exchange of data and views on tests and standards between the Laboratory and the United States Pharmacopeia.

Each year the Laboratory edits for the Council on Pharmacy and Chemistry the section of New and Nonofficial Remedies concerned with tests and standards. This year an extensive revision of the style of this section has been undertaken. This has been done to clarify the tests for the pharmaceutical manufacturer who uses tests and standards as procedures of control, for the pharmacist as a source of information for compounding drugs, and to law enforcement agencies which may use it as a series of regulations as a guide for the exclusion of unworthy products in the medical field. Some revision was required because of the issue of new editions of the United States Pharmacopeia and National Formulary, because tests and standards of drugs appearing in the official compendia are omitted from New and Nonofficial Remedies. Tests and standards developed by the Laboratory for 42 products will be wholly or in part incorporated in the forthcoming edition of the official compendia.

Report of the Council on Physical Medicine and Rehabilitation

In 1948 the scope of the Council's responsibilities was extended to include rehabilitation, and the name of the Council was altered accordingly. "Rehabilitation" is a broad term, and could be interpreted to embrace the entire field of medicine. The Council, however, interprets it in a more restricted sense as the process of restoring handicapped persons and returning them as useful members of society at the earliest possible moment. It might be referred to as the third phase of medical care in that it takes the patient from the bed and seeks to reestablish him in his former job or in a substitute one to adjust to his handicap. The change is reflected in the preparation of three new chapters for inclusion in the 1950 edition of the "Handbook of Physical Medicine and Rehabilitation," chapters on "Rehabilitation," "Amputees and Artificial Limbs" and "Applications of Physical Medicine to Problems of Hearing."

Approximately 110 pieces of apparatus were submitted for consideration during 1949, of which 70 were considered, inspected and reported on in THE JOURNAL. Consideration is going forward on the remaining appliances. Among the devices were hearing aids, electrocardiographs, humidifiers, contraceptive devices, incubators, diathermy equipment, audiometers, stethoscopes, nebulizers, sun lamps, filters, black light lamps, irrigators and protectors, bandages, resuscitators, foot exercisers, germicidal lamps, comfort pillows, insufflators, glycol vaporizers, enuresis equipment, steam packs, blood irradiators, oxygen tents, low voltage generators, cauteries and exercising devices.

In some instances the Council cooperated with the Council on Pharmacy and Chemistry to investigate and report on products which were in part physical and in part chemical.

The Council was called on to assist in formulating curriculums for undergraduate training in physical medicine and rehabilitation in medical schools. It cooperated with the Council on Medical Education and Hospitals regarding the

content of curriculums for residencies in hospitals, postgraduate instruction on the professional level and schools for lay assistants.

PUBLICATIONS

The booklet "Apparatus Accepted" was revised and brought up to date. The "Handbook of Physical Medicine" has been completely revised and is in the hands of the printers. It will now be known as the "Handbook of Physical Medicine and Rehabilitation."

Thirteen adopted articles were published during the year, and several other articles are being considered and are awaiting publication.

ATOMIC ENERGY

Radioactive materials have been considered by the Council. Recently radon ointments have been found unacceptable and the information made available. Radium D applicators for use in eye conditions are still undergoing consideration.

PRODUCTS CONSIDERED

Three professional ultraviolet lamps were considered and accepted. Two germicidal lamps were considered, one accepted and one not accepted. One infra-red, one diagnostic and one black light were considered and accepted. For relief of the allergic patient, one pillow, one cover for mattresses and pillows and one baby comforter were considered and accepted. One pillow designed for the comfort of the pregnant woman was accepted. Two generators of direct and alternating current for use in diagnosis and therapy were considered. In the opinion of the Council, there is no necessity for multiplicity of current combinations in an electro-therapeutic apparatus, since the evidence submitted to justify some of them is not critical. Several glycol vaporizers were submitted and it is the opinion of the Council that insufficient critical evidence has been presented to warrant acceptance of the devices as a means of preventing cross infection such as colds and other respiratory diseases.

COUNCIL CONSULTANTS

American Health Resorts.—The Consultants on American Health Resorts have been going forward with consideration of spas in the United States. Rules under which the Council accepts health resorts for listing have been revised and are ready for distribution. One health resort at the Army and Navy General Hospital, Hot Springs, Ark., was accepted this year.

Audiometers and Hearing Aids.—The report "Minimum Requirements for Acceptable Pure Tone Audiometers" was revised and published. Twenty-two hearing aids were submitted, and 20 were accepted; the others are undergoing consideration. Five audiometers were submitted, and 2 were accepted; the others are undergoing consideration.

Clinical Thermometry.—The Council through its Consultants on Clinical Thermometry is continuing its survey of clinical thermometers. The accuracy, efficiency, calibration and other problems related to clinical thermometers are being studied.

Contraceptive Devices.—The report "Requirements for Acceptability of Contraceptive Devices" was revised and published. Two devices were submitted and two were accepted.

Education.—The Consultants on Education were most active during the year studying the essentials of a school for physical medicine and rehabilitation and suggesting a curriculum for postgraduate study and internship in hospitals. In this program the Council cooperated with the Council on Medical Education and Hospitals and also with the American Congress of Physical Medicine.

Electrocardiographs.—Six instruments were submitted and three were accepted and reports published in THE JOURNAL. The others are undergoing consideration.

Electroencephalographs.—The report "Minimum Requirements for Acceptable Electroencephalographs" was published and the Council is going forward with the consideration of these instruments.

Occupational Therapy.—The Consultants have advised the Council relative to the problems which are of mutual interest in the field of occupational therapy.

Ophthalmic Devices.—The Consultants have given advice on tinted lenses and contact lenses and have presented a report to the Council on radium D applicators to the eye for adoption and publication. It has sponsored the preparation of an article on color blindness and has cooperated with the Bureau of Health Education in consideration of lighting in public schools.

Respirators.—One portable respirator was submitted and accepted. Other respirators are undergoing consideration.

Roentgen Rays and Radium and the Medical Aspects of Atomic Energy.—The Council through its Consultants has gone forward with the consideration of certain radioactive materials. Most of this work has been confined to radon and radium products. The Medical Department of the Atomic Energy Commission has studied the medical applications of isotopes.

Demonstrations of the consideration and use of the Geiger-Müller counter have been given before a number of lay audiences in the Chicago area, and the Council office has cooperated with the Bureau of Health Education in giving public lectures, with the Bureau of Scientific Exhibit in setting up demonstrations, with the Committee on Medical Motion Pictures in reviewing new educational films and with the editorial staff in preparing articles and reviews.

The Council has cooperated with the American Red Cross in the study of artificial respiration.

Report of the Council on Foods and Nutrition

During the past year the Council on Foods and Nutrition has continued to take an active interest in the problem of the contamination of foods by chemical technologic aids. At its annual meeting the Council passed a resolution stating the necessity for more adequate pretesting of all chemicals which might be used on or in foods. Special attention was called to the importance of analytical methods and chronic toxicity tests prior to their being released for general use. This subject was commented on editorially in THE JOURNAL July 2, 1949. The use of surface-active compounds was singled out for special mention in a statement adopted by the Council and published in THE JOURNAL July 2, 1949. It was stated that the use of these compounds can result in the dilution of nutritive values of foods such as bread because an "acceptable" product can be made using less milk, eggs and fat. Information concerning the harmlessness of these agents is regarded as inadequate.

The increase in the number of infant food preparations made to resemble breast milk from a chemical standpoint has resulted in the Council's decision to require more complete evidence of the growth-promoting properties of such products than has been required in the past. All companies producing these preparations have been appraised of this new requirement, and at the present time several clinical studies have been initiated by them. The results of these studies will prove valuable to those members of the profession concerned with the feeding of infants.

The Council recognizes the increasing use of low calory foods in the treatment of obesity and is giving increased attention to the improvement of such products. For example, in the case of water-packed fruits, careful selection of the raw products and the use of modern processing technics can result in an improved product from the point of view of patient acceptability. One of the large packers of such products is cooperating with the Council in this program at the present time.

The Council maintains an active interest in many public health movements which are concerned with food and nutrition. The following examples are representative of the role played by the Council in such movements.

The Council continues to encourage the use of vitamin D milk. The ever increasing number of accepted brands of fresh milk, evaporated milk and whole powdered milk fortified with vitamin D bears witness to the fact that the efforts of the Council in this direction are not in vain. As a direct result of this program, almost all the evaporated milk consumed in this country at the present time is fortified with vitamin D. That the widespread use of vitamin D milk has played an important role in

the almost complete eradication of rickets in the United States seems beyond question.

The value of oranges, grapefruit and tomatoes as a source of vitamin C is well known, but it has been established that the canned juices of these fruits may vary widely in vitamin C content. The Council recognizes the importance of making available to the people of the nation dependable sources of vitamin C and toward this end the Council accepts such juices containing high natural levels of vitamin C. The advent of the frozen concentrate has been recognized by the Council as making possible the almost complete retention of the vitamin C occurring in the fresh fruit. At the present time four of the largest selling brands of frozen orange juice concentrates have satisfied the requirements of the Council and have been accepted.

The role of iodine in the prevention of endemic goiter has long been established. The Council continues to encourage all efforts in the education of the public to use iodized salt in its diet.

In addition to keeping the profession informed of the important advances in the field of foods and nutrition, the Council's efforts are directed toward the prevention of false or misleading advertising claims in the promotion of accepted foods. In general, the cooperation of the manufacturers and their advertising agencies has been gratifying. In addition to advertising for accepted foods, the Council also reviews general educational advertising dealing with the nutritional values of groups of foods in which there is no reference to specific brands.

The Council has cooperated with various governmental and non-governmental agencies, such as the Food and Drug Administration, national and local Better Business Bureaus and state and city health departments. The Council is frequently requested to give support to the work of such agencies. However, the Council supplements rather than duplicates the work of these organizations. The Council also has advised other departments at the headquarters offices when they have had problems relating to foods and nutrition.

As usual, members of the Council continue to receive requests to discuss current nutrition topics and related subjects before various scientific and lay groups.

The Council notes with interest the incorporation, under the laws of the State of New York, of the Food Law Institute, which has as its aims the promotion of a better understanding of the food laws and the encouragement of research. A more complete description of this development will appear in the report of the Bureau of Legal Medicine and Legislation, the director of which has been designated as a member of the Lawyer's Advisory Committee of the Institute.

The first Joseph Goldberger Award in Clinical Nutrition was presented posthumously, at the 1949 Annual Session of the American Medical Association, to Dr. Randolph West for his work in identifying vitamin B_{12} and its relation to the anti-pernicious-anemia factor in liver extract. The Council regrets that the untimely death of Dr. West prevented his acceptance of the award personally. However, Dr. West had been notified of his selection as the recipient of this award prior to his death.

The Council requires the full cooperation of the medical profession for its food acceptance program to continue as an important factor in the maintenance of the nation's health.

Report of the Bureau of Investigation

During the year ended Aug. 31, 1949, the Bureau of Investigation handled more than 3,400 inquiries on about 4,100 subjects on the various aspects of quackery and "patent medicine" promotion. About one third of these inquiries came from members of the medical profession. The balance came from lay persons desiring information on particular subjects for their own benefit, from students and teachers as part of their classroom activities, from Better Business Bureaus and from federal and state authorities in pursuance of their regulatory activities under the various laws they enforce.

There appears to be increasing interest on the part of students in the information which the Bureau has to offer on "patent medicines" of all kinds. Many courses in consumer education have as part of their regular curriculum an assignment to make inquiry of the Bureau on this subject.

Interest in specific subjects centered around quackery in cancer and "patent medicine" promotion in the rheumatism and arthritis fields, as well as the widely advertised "reducing plans."

The Bureau contributed six and a half columns of space to THE JOURNAL and contributed material forming the basis for a report on cancer published under the auspices of the Council on Pharmacy and Chemistry, amounting to eleven and a half columns.

For a period of approximately three months the Director's attention was given to assisting in the investigation of facts involved in the preparation for trial of a libel suit brought in Dallas, Texas, against the Association, the Editor of THE JOURNAL and others. The cooperation of Texas doctors was generously given. The trial was concluded in March and a nominal judgment was rendered in favor of the plaintiff. No appeal was taken. Neither the Association nor the Editor was served with process and hence were not parties to the judgment.

The director appeared on two television programs on the subject of mechanical quackery and contributed to two series of radio network shows.

An exhibit on mechanical quackery was well received at the Interim Session held in St. Louis in December 1948 and at the annual meeting of the Southern Medical Association held in Miami, Fla., in October 1948.

Material from the files of the Bureau is constantly being sought by magazine writers, motion picture writers, newspaper reporters and others having need for such information in their own activities.

The Bureau seeks the continued cooperation of all physicians, government agencies and private groups whose interest in the public welfare extends to the realization that now, even more than in the past, there is constant need for the exposure of quacks, cultists and "patent medicine" promoters whose sole motivation is profit, based on deception of the patient or customer.

Report of the Council on Industrial Health

One of the significant events of the past year was the adoption by the House of Delegates of a program for the advancement of medicine and public health, one section of which advocated greater emphasis on industrial medicine and on accident prevention. The Council on Industrial Health has directed its principal efforts toward a practical implementation of this broad policy.

PUBLIC ACCEPTANCE

Improvement in the amount and quality of industrial medicine depends fundamentally on increased public acceptance. Authorization was requested and received to set up some form of regular permanent consultation with labor and management on the assumption that wider support would occur through joint rather than single-handed effort. Several preliminary meetings with representatives of the American Federation of Labor, the Chamber of Commerce of the United States, the Congress of Industrial Organizations and the National Association of Manufacturers have uncovered strong interest. A basic plan for cooperative activity, agreeable to the representatives of these organizations, has been prepared for ratification by the Board of Trustees. Following are the proposed articles of agreement for consideration by the House.

JOINT COMMITTEE FOR THE ADVANCEMENT OF HEALTH IN INDUSTRY

Purpose.—The purpose of the Committee is to contribute to the national well-being through the protection and improvement of the health of employees in commerce and industry by active support of

1. Safe and healthful working conditions through the application of the principles of prevention.
2. Positive health promotion through medical appraisal, adequate records, health education and counseling.
3. High quality medical and rehabilitation services for the industrially disabled.
4. Improved administrative methods.

5. Research and investigation.
6. Employer-employee cooperation at the plant level to attain these ends.

Organization.—1. Membership. The membership of the Committee shall consist of one staff member and one member at large to be designated by

a. The American Federation of Labor.
b. The American Medical Association.
c. The Chamber of Commerce of the United States.
d. The Congress of Industrial Organizations.
e. The National Association of Manufacturers.

Other agencies or groups may be added to full or advisory membership as agreed to by the original constituents.

2. Officers. A chairman, representing the constituents in rotation, shall preside over the meetings. A secretary shall be elected annually to keep the records, prepare agenda and to conduct other routine affairs.
3. Subcommittees and Consultants. Subcommittees and consultants may be appointed for the consideration of special problems.
4. Meetings. The determination of the time and place of the next meeting shall be the last order of business at each session.

Support.—Agreed on projects of the joint committee shall be carried out and supported as each constituent organization shall decide in accordance with its own established policies and procedures.

Procedure.—1. Ratification. Actions of the Committee will be subject to ratification by each constituent organization.

2. Scope. The Committee will consider and make recommendations regarding

a. Scope, distribution and administration of industrial health services.
b. Maintenance of high professional standards.
c. The promotion of similar activities by appropriate groups in regional, state and local areas.
d. The Annual Congress on Industrial Health of the American Medical Association.
e. The stimulation of special studies in the technical, social and economic aspects of industrial health services.

PROFESSIONAL RELATIONS

As the demand for medical service in industry grows, it is important that the medical profession be prepared to meet it. Two major activities have been stressed by the Council—adequate training and professional organization. During the past two years, a member of the Council staff has been actively engaged in assessing the educational resources for industrial medicine in the United States and Canada at the undergraduate, postgraduate, residency and fellowship levels. His findings, on the whole, show commendable improvement. Several reports descriptive of the current educational picture are in the final stages of preparation.

In recent months the Council has received more inquiries from the committees on industrial health in the state and county medical societies than at any previous time. Some of these committees are newly formed, and in some instances it is a new chairman of a well established committee who is seeking to develop a more active program. All want to know how to promote industrial health. A number of outstanding industrial health conferences have been sponsored by these groups all over the country. This record of spontaneous constructive action is the most encouraging feature of the Council's program. As a result, a census of all committees on industrial health is being taken which, when completed, will provide the means for supplying these committees with a series of recommended practices based on the best and most successful current programs.

In the same way, the industrial medical interests of specialty organizations will be emphasized in order that the requirements of industry may be better understood by the major consulting specialty groups—surgery, dermatology, ophthalmology and internal medicine.

To promote better integration within the American Medical Association and with closely allied organizations, the Editor of the *Archives of Industrial Hygiene and Occupational Medicine*, the delegate from the Section on Preventive and Industrial Medicine and Public Health, the Chief of the Division of Industrial Hygiene of the United States Public Health Service and the President of the American Association of Industrial Physicians and Surgeons have been appointed as ex officio members of the Council.

INDUSTRIAL NURSING

Some years ago the Council prepared "Standing Orders for Nurses in Industry" which were recommended to the profession at large as guides to practical physician-nurse relations in industry. Unfortunately, these orders have come to be regarded as substitutes for the personally devised and signed instructions of individual plant physicians and in certain areas have been used as subterfuges by nurses who engage in procedures for which they are not professionally qualified. Several prosecutions of nurses for violation of medical practice acts are of serious concern to the industrial medical and industrial nursing professions, as well as to industry itself. The entire matter of standing orders is currently under investigation by a joint committee whose findings will be used by the Council in its proposed revision of this material.

ACCIDENT PREVENTION

Several recent resolutions of the House of Delegates have enunciated the great concern of the medical profession over the growing menace of accidents. These resolutions express the intention of the American Medical Association to cooperate with all agencies interested in accident control. The Secretary of the Council participated in the President's Conference on Industrial Safety in the Spring and placed on record with the Bureau of Labor Standards the American Medical Association's viewpoint. It is expected that this program, sponsored by the President through the United States Department of Labor, will come to be an important annual function.

Since the National Safety Council is the principal independent agency in the field, these same resolutions were submitted to its president and managing director. It has been determined that although many departments in the American Medical Association are concerned, it will be least confusing to channel all contacts through the Council on Industrial Health at the outset. It has been agreed also that a joint planning committee made up of three representatives from each group will meet to determine ways in which the doctor and the safety engineer can reduce accidents in industry, in the home, in the school and on the highway.

SOCIAL IMPLICATIONS OF INDUSTRIAL MEDICINE

In lieu of wage increases, present trends in labor-management negotiations emphasize welfare benefits, many of which involve the medical profession to a greater or lesser degree. Certainly the physician in industry will find his sphere of action and influence considerably broadened. It is doubtful that the medical interest involved is clearly realized, even by the profession itself. Two projects are expected to define the nature of and demand for medical participation in industrial welfare programs. The Council on Medical Service has appointed a committee to investigate over-all medical services for industrial workers and has invited the Council on Industrial Health to nominate members to this committee. In addition, it will consider cash sickness insurance with its attendant problems of certifying the nature and probable duration of nonoccupational illness or injury. The Council on Industrial Health, the Board of Trustees and the House of Delegates all have approved the general policy of cooperative industrial health planning by management, labor and medicine, provided scientific and ethical standards are maintained. It is the Council's belief that this passive approval should be changed to active insistence. At all events, a definite policy is urgently needed.

The industrial physician also is assuming much greater importance in plant personnel and industrial relations. These

have profound implications in our industrial civilization and involve also the professional skills of the sociologist, anthropologist and psychologist. The Council strongly feels the need for dependable advice along these several lines and is setting up a group of consultants capable of qualified consideration of these matters and with ability to carry on a program of integrated education and action.

WORKMEN'S COMPENSATION AND REHABILITATION

Workmen's compensation administration has taken on added significance by reason of recent legislation in New York State which assigns responsibility for unemployment compensation for nonoccupational disability to the industrial commission rather than to the state unemployment division. All state medical societies have been notified of the expert assistance in workmen's compensation problems now available through consultants attached to the Council on Industrial Health. The number and diversity of inquiries already received amply testify to the usefulness of this activity. A clearer understanding of the major issues in this important field has developed through professional contacts, correspondence, attendance at meetings and questionnaires. There is universal agreement that great progress can be made by setting up some form of regular consultation between the state medical societies and the industrial commissions. To facilitate such consultation, records of successful administrative and medical procedure are being collected as a means for joint consideration. Liaison with the International Association of Industrial Accident Boards and Commissions and with the American Bar Association is planned and should promote better common understanding of medical, legal and administrative problems.

Although major responsibility for rehabilitation affairs rests with the Council on Physical Medicine and Rehabilitation, the Council on Industrial Health retains a major interest in those phases which deal with reemployment of the disabled. During the year, the Secretary of the Council was appointed a member of the Executive Committee of the President's Committee on National Employ the Physically Handicapped Week, in addition to acting as chairman of the Medical Subcommittee. A recent government appropriation gives assurance that this agency will conduct a vigorous campaign to give the handicapped not preferential treatment but equal opportunity for jobs they are capable of performing.

Report of Council on National Emergency Medical Service

This report of the activities of the Council on National Emergency Medical Service covers the period from Oct. 1, 1948 to Oct. 1, 1949.

APPOINTMENT OF CIVILIAN MEDICAL ADVISORY COMMITTEES TO THE NATIONAL SECURITY RESOURCES BOARD AND THE SECRETARY OF DEFENSE

Late in 1948 Civilian Medical Advisory Committees were appointed to the National Security Resources Board and Secretary of Defense after the House of Delegates of the American Medical Association had several times adopted resolutions recommending the appointment of such committees. Adequate civilian representation at the highest policy level of the government in connection with mobilization and utilization of medical personnel was finally achieved. Because of changes of personnel in the National Security Resources Board and some confusion relative to its proper sphere of responsibility, the Civilian Medical Advisory Committee to this Board has found little constructive work to perform. The Advisory Committee to the Secretary of Defense, on the other hand, has held several meetings and from these meetings have come many fundamental recommendations whose adoption by the armed forces have resulted in increased economy and efficiency in the utilization of medical personnel.

PROCUREMENT OF MEDICAL PERSONNEL FOR THE ARMED FORCES

An important program of the Council this year has been its cooperation with the armed forces in the drive to procure additional medical personnel. All of the outlets of the American Medical Association, including THE JOURNAL, the Secretary's Letter and special mailings to state and county medical societies and to individual physicians in selected age groups, have been utilized to intensify the procurement program. Concurrently with this program, the armed forces themselves have conducted a vigorous educational and publicity campaign. This campaign and the more economic utilization of medical officers have resulted in some improvement, but there still remains a definite need for additional medical and related personnel in the Army, Navy and Air Force.

ELEVATION OF POSITION OF THE SURGEON GENERAL OF THE ARMY

On recommendation of the Council, the House of Delegates adopted resolutions urging that the position of the Surgeon General of the Army be elevated to a position compatible with its importance and guaranteeing direct access to the Chief of Staff. The Council is pleased to report that action was taken by the Army during the last year to effect this change.

ESTABLISHMENT OF THE OFFICE OF MEDICAL SERVICES IN THE OFFICE OF THE SECRETARY OF DEFENSE

A significant advance in the medical organization of the armed services was made when a Medical Services Division was adopted within the Office of the Secretary of Defense. The appointment of Dr. Richard L. Meiling, a member of the Council on National Emergency Medical Service, as Deputy Director of the new division, with arrangements for his assumption of the Director's position a few months later, has already been reported to the House of Delegates by the Council. On Oct. 1, 1949, Dr. Meiling was officially appointed Director of the Office of Medical Services. Notwithstanding the pressure of Dr. Meiling's new duties, he will continue to serve as a member of the Council.

POINT SYSTEM—PUBLIC LAW 810

After the passage by the House of Delegates of resolutions in connection with the determination of point credits required by medical corps reserve officers for the completion of a satisfactory year of federal service under Public Law 810 (80th Congress), copies of which were sent to the President and selected members of the government and Congress, action was finally taken by the 81st Congress allowing credit for satisfactory service to extend to July 1, 1949 rather than July 1, 1948 as originally enacted.

PROVISION OF FELLOWSHIP AND OTHER PRIVILEGES TO THE NEWLY ESTABLISHED UNITED STATES AIR FORCE

Amendments were offered to the Constitution and By-Laws at the June 1949 session to effect changes which will give to the medical officers of the United States Air Force the same privileges as those now provided officers of the other forces. The final adoption of these amendments will be recommended to the House of Delegates at the December 1949 session.

MEETINGS AND CONFERENCES

The semiannual meeting of the Council on National Emergency Medical Service was held at American Medical Association headquarters March 21, 1949. Representatives attended from medical associations and societies from Arizona, Arkansas, Connecticut, District of Columbia, Florida, Georgia, Hawaii, Illinois, Indiana, Iowa, Kentucky, Louisiana, Maryland, Michigan, Minnesota, New Jersey, North Carolina, Ohio, Pennsylvania, South Dakota, Tennessee, Texas, Virginia, Washington and Wisconsin, and there were guests from governmental and private agencies. An important meeting of the Council will be held in Washington, D. C., on December 4, attended by its consultants and invited guests, to consider the program of the Council for the coming year and particularly to make plans for the orderly mobilization and effective distribution of medical and related personnel, in the event of a national emergency or war. A report of this meeting will not be presented until the June 1950 meeting of the House of Delegates, but it is possible that resolutions may be offered for the consideration of the House at the December meeting.

V 1
194

Bureau of Legal Medicine and Legislation

Following the practice of the last several years, this report will not contain detailed references to the many bills of medical interest that have been introduced in the 81st Congress. The report of the Washington Office will advise the House of Delegates of the more important of such measures. The Bureau has, however, kept currently informed on these bills and has received promptly copies for study. It maintains a complete file of them.

Much correspondence has been carried on with state associations concerning particular measures and the replies made to inquiries have been based on principles previously established by the House with respect to federal participation in the field of health and on actions taken by the Board of Trustees and by the committee that has been created to give prompt consideration to measures that are from time to time introduced in Congress.

In addition, the Bureau has collaborated fully in assembling material for use by witnesses who have appeared before Congressional Committees to acquaint the members of such committees with the viewpoints of medicine. On request, too, detailed analyses have been prepared of the more important bills and these analyses have been published in THE JOURNAL. As an example, there was published in THE JOURNAL for April 9, 1949, comments on S. 1456, commonly referred to as the Hill bill and in THE JOURNAL for May 7, 1949, a summary of the provisions of S. 1679, commonly referred to as the Thomas or Administration bill.

At the request of the editor of the American Bar Association journal, a statement was prepared on the principal features of the four major bills pending in Congress proposing health programs and this statement was published in the September issue of that journal.

FEDERAL FOOD, DRUG AND COSMETIC ACT

In the report of the Bureau submitted to the House of Delegates at the St. Louis meeting, reference was made to the creation of a Committee on Food, Drug and Cosmetic Law by the American Bar Association. This committee has been divided into subcommittees, one of which is the Subcommittee on the Drug Law. The purpose of this subcommittee is to make studies of the Federal Food, Drug and Cosmetic Act, as it relates to drugs, to ascertain what changes are needed to make it a more effective instrument within constitutional limitations. The Director of the Bureau is a member of this subcommittee.

There have been referred to the subcommittee for consideration, by the chairman of the whole committee, the following items:

(1) A suggestion that the federal act be amended to authorize the administrative requirement of a pretesting certification for any new drug, on the basis of evidence adduced at an appropriate public hearing open to the introduction of opposing evidence and subject to a review by the courts, and

(2) A suggestion that the federal act be amended to eliminate warnings from the retail labeling of prescription drugs, except when such warnings are directed by the prescriber, to define the scope and conditions of a "prescription legend" labeling of drugs and to provide that the list of drugs subject to this labeling requirement shall be established on the basis of an appropriate public hearing and a due court review.

There has been no meeting of this subcommittee, but its chairman, Mr. James F. Hoge of New York City, has requested individual members to submit preliminary reactions to the suggestions now before the subcommittee. This the Director of the Bureau has done, his comments being based in the main on a most helpful memorandum from the Secretary of the Council on Pharmacy and Chemistry, Dr. Austin Smith. Indications are that the subcommittee will hold its initial meeting at an early date, possibly in January of next year.

FOOD LAW INSTITUTE, INC.

A movement that presages greater consideration of the existing law relating to food was initiated with the formation of an organization incorporated under the laws of New York, March 16, 1949, under the corporate name of the Food Law Institute, Inc. The organization was created and will be initially financed by representatives of the food industry. Its general purposes have been summarized briefly as follows: (1) To promote a due teaching and study of the United States food law and of valuable research publications on it, for educational purposes and to advance the general public welfare; and (2) to do so as a public organization which is dedicated to a constructive operation and development of this law in its fundamental conception of a social law essential to safeguard the national health and economy.

There will be three classes of members. Founder members will consist of food and related manufacturers who financially support the Institute and who are elected by the Board of Trustees as such members. Sustaining members will be others who financially support the Institute and are elected by its Board of Trustees as such members. Public members will be representatives of the public at large who may or may not financially support the Institute and who are elected by the Board of Trustees as such members.

An initial major project of the Institute has been to underwrite a food law chair at the New York University School of Law. This chair will be operated at a post-graduate level and on the seminar basis in part. Fellowships will be established. Desirable post-graduate students from different sections of the country will be sought to attend the course offered and such students will participate in the research work of the chair. In addition, the Institute will develop a program to stimulate coordinated teaching and research in the food law by other leading law schools and possibly by medical, public health and business schools. It is hoped thus to make the law generally known to those who must deal with it and to train lawyers expert in this law for industry and public service who understand its basic philosophy and true relation to our free institutions.

The Institute will also develop a broad program for constructive research studies of the food law and a systematic issuance of guiding or informative publications on it. To function in connection with the Institute, there has been created a lawyers' advisory committee and the Director of the Bureau has accepted an invitation to be a member of that committee. The first meeting of the committee will be held in New York City, November 16.

In connection with this development the Bureau has sought the counsel of the Secretary of the Council on Foods and Nutrition, Dr. James R. Wilson, and will continue to do so.

CERTIFICATION OF CHECKS IN PAYMENT OF FEDERAL NARCOTIC TAX

As has been previously reported by the Bureau, the tax imposed on physicians by the Harrison Narcotic Act is payable by stamp and under existing law collectors of internal revenue are not authorized to accept uncertified checks for the annual tax of $1 payable by physicians who register under the federal law. This certification requirement has brought forth protests from a number of individual physicians and from the House of Delegates itself.

The Bureau has discussed the matter on a number of occasions with the Chief of Staff of the Joint Committee on Internal Revenue Taxation and with the office of the Commissioner of Internal Revenue. The certification requirement can be eliminated only by a change in existing law. Such a change was suggested in a bill introduced June 2, 1949, by Representative Doughton, H. R. 4965, apparently at the request of the Treasury Department. This bill contained a number of administrative changes to facilitate the work of the Bureau of Internal Revenue. Concerning the section of the bill dealing with the certification requirement, Section 10, a statement prepared by the Treasury staff and the staff of the Joint Committee on Internal Revenue Taxation, dated June 7, 1949, had this to say:

"Existing law allows collectors to accept uncertified checks in payment of taxes, but requires that checks tendered in payment for internal-revenue stamps be certified. This requirement as to stamps causes additional work for the Bureau and inconvenience and vexation to taxpayers. Stamps to be used in payment of taxes are usually sold to financially responsible persons and organizations, and therefore the revenues would

not be adversely affected by liberalizing the law in this respect. Sections 10 of the bill would thus authorize the Commissioner to prescribe conditions under which collectors may accept uncertified checks in payment for stamps.

"In addition, present law does not authorize the acceptance of checks drawn on banks or trust companies organized in the possessions or Territories. The section would also remedy this defect by bringing these banking organizations within the scope of the statute."

No action has been taken by the House of Representatives on this bill, as such. Some of the sections contained in it, however, were added by the Senate Committee on Finance to another House bill, H. R. 5086, but not the section relating to check certification, the House accepted the Senate amendments and the bill has become a law.

The Bureau will continue its efforts to have eliminated this requirement which constitutes a petty annoyance annually to many physicians.

OSTEOPATHY IN KANSAS

Reference was made in the report of the Bureau submitted to the House of Delegates at its St. Louis meeting last November to litigation brought by certain osteopaths practicing in Kansas to challenge the validity of the Kansas osteopathic practice act. These osteopaths filed a complaint in the United States District Court of Kansas in October 1947 to restrain the governor and attorney general of Kansas from enforcing certain sections of that act. The same provisions of the challenged law had previously been held by the State Supreme Court to limit the practice of osteopathy to a practice of healing without the use of drugs as remedial aids or operative surgery. Trial was had in April 1948 before a three judge federal court pursuant to provisions of the United States Judicial Code. Highlighting the trial was the volume of evidence, gathered through considerable research, offered on behalf of the governor and attorney general to prove that the osteopathic concept of healing, when the Kansas act was passed in 1913, did not embrace drugs as therapeutic remedies or operative surgery. Quotations from the writings of the founder of osteopathy, from catalogs and curricula of its schools and from the journal of the American Osteopathic Association were abundant. In November 1948 the court announced its decision holding the Kansas osteopathic act valid, as construed by the State Supreme Court, refusing to enjoin its enforcement and dismissing the action at the cost of the plaintiffs. The usual post-trial motions were filed, argued and denied. Despite plaintiffs' announced intention to appeal to the Supreme Court of the United States from any decision adverse to them, no step to perfect such appeal was taken within the time limit prescribed by law and the litigation is therefore terminated. The legal effect of the case was summed up by the Chief Judge of the court as follows: "I repeat, they [osteopaths] cannot broaden the license to practice osteopathy in Kansas by the simple expedient of varying or expanding their curriculum. . . . It is my conclusion that the [osteopathic practice] statute, as construed by the Supreme Court of Kansas, is valid."

ABSTRACTS OF COURT DECISIONS OF MEDICOLEGAL INTEREST

During the year the Bureau has continued to supply abstracts of court decisions of medicolegal interest for publication in THE JOURNAL. A few of the more important decisions warrant brief emphasis in this report.

The district court of appeals of California, in a decision later affirmed by the Supreme Court, held that, under the circumstances and conditions disclosed by the evidence, the general rule is that "as a part of the requirements which the law exacts of general practitioners of medicine and surgery, or other schools of healing, if, in the exercise of the care and skill demanded by those requirements, such practitioner discovers, or should know or discover, that the patient's ailment is beyond his knowledge or technical skill, or ability or capacity to treat with a likelihood of reasonable success, he is under a duty to disclose the situation to his patient or advise him of the necessity of other or different treatments."[1] The same court in another decision held that testimony relating to chemical tests to determine the amount of alcohol in the defendant's blood was admissible in evidence even though the blood sample was obtained while the defendant was nearly unconscious and was suffering from shock and cerebral concussion.[2] The Supreme Court of Arkansas denied the right of the State Board of Chiropractic Examiners to waive the requirements of the basic science act in granting reciprocity certificates.[3] In a Kentucky case the Court of Appeals upheld the right of a school board to enforce a resolution requiring children to be vaccinated against smallpox or else be excluded from the city schools.[4] A program of medical care established by the State Board of Health of Maryland was held by the Court of Appeals of that state not to include services furnished by chiropractors.[5] A requirement that membership on a hospital staff be conditioned on membership in the county medical society was held unreasonable by the Supreme Court of Indiana.[6] The Supreme Court of Colorado held it to be an unreasonable exercise of the police power for a statute to provide for cancellation of a physician's license for three years' nonpayment of an annual registration fee and to require as a condition precedent to reinstatement of the license that the physician qualify for licensure under the statutory requirement obtaining at that time rather than those in effect at the time the original license was issued. In this case the requirements had been considerably increased.[7] The Supreme Court of Washington held that the practice of obstetrics and the administration of ether or a hypodermic are not permitted to sanipractors.[8] The Supreme Court of Oklahoma held that the system of grading medical schools by the Association of American Medical Colleges applicable to schools within the United States could not be applied to medical schools located outside the grading area.[9]

CORPORATE PRACTICE OF MEDICINE

There was submitted to the House of Delegates at the Atlantic City Session a summary of a study that had been made by the Bureau on the corporate practice of medicine. This study was made for the Committee on Hospitals and the Practice of Medicine, of which Dr. Elmer Hess of Pennsylvania was Chairman. The complete study is now available in printed form and may be obtained from the Bureau. It includes a reference to the pertinent provisions in medical practice acts, to the laws under which incorporation may be effected, to decisions of courts and to opinions rendered by state attorneys general.

THE PROFESSIONS OF MEDICINE AND LAW

The Bureau has participated during the year in joint meetings of local medical and bar associations at Galesburg and Bushnell, Illinois, and at Cumberland, Maryland. All three meetings were very well attended by lawyers and physicians and much interest was evidenced in the discussions of problems of mutual interest. Much value results from such meetings and the Bureau takes this opportunity to urge that state and county medical societies take the initiative in arranging periodically meetings with the state or local bar associations.

There was recently submitted to the Board of Managers of the Chicago Bar Association a report by the Committee on Federal Legislation of that Association concerning pending legislation in the Congress proposing to federalize the practice of medicine. In approving this report, July 14, 1949, the Board of Governors prepared a preliminary statement to the report which is of such significance as to warrant its reproduction here. That statement emphasizes admirably the mutuality of interest of physicians and lawyers in any proposal to subject either profession to federal direction and control. This is what the Board of Managers said:

"In surveying the facts brought forward in this report, and the general considerations urged both for and against the proposed legislation, the Board was of the opinion that some of the implications of many of the steps proposed are so significant that they cannot be lightly passed over.

"The medical profession and the legal profession are greatly divergent in many aspects; nevertheless, they have much in common. The aims of one are to prevent and cure mental or

1. Sinz v. Owens, 196 P.(2d) 32; 205 P.(2d) 3.

2. People v. Tucker, 198 P.(2d) 941.
3. Lindquist v. State, 213 S.W.(2d) 895.
4. Mosier v. Barren County Board of Health; Stuart v. Same, 215 S.W.(2d) 967.
5. Crider v. Cullen, 63 A.(2d) 618.
6. Hamilton County Hospital v. Andrews, 84 N.E.(2d) 469.
7. Lipset v. Davis, 203 P.(2d) 730.
8. State v. Hosek, 203 P.(2d) 693.
9. Application of State Board of Medical Examiners In Re Nathan, 206 P.(2d) 211.

physical sickness. The object of the other is to safeguard the rights of persons and if they are unjustly infringed, to obtain redress, both through the practicing lawyer and the lawyer when he becomes a judge.

"Both professions have been governed since ancient times by codes of ethics peculiar to themselves and orginating only from each profession. 'The Hippocratic Oath,' which stemmed from Hippocrates, was a voluntary oath, itself containing a code of ethics which may well guide men of medicine for all time. The canons of ethics of the legal profession were likewise developed by lawyers alone for their guidance and self-discipline. Both classes of activities involve specialized learning and great responsibility. Neither is primarily commercial in its nature, they are fundamentally based upon service.

"The best development of both skills has been apart from governmental action or interference. The law schools and the medical schools, in the final analysis, produce lawyers and doctors, and no governmental official in a free society intervenes.

"It is our considered opinion that the invasion of government into the practice of medicine presages a similar intrusion into the practice of law. It has been said that the tide of governmental management is resistless, that one may as well become reconciled to the fact of ever-increasing authoritarian regulation. That there has been such a movement is no reason why it should not now be stemmed, and if possible, reversed. Lawyers have always been the first to preserve the rights of the individual, and those things which time has shown are valuable in our way of life.

"In a recent number of Harper's Magazine, there is a quotation from an interview with a Nazi prisoner of war who said: 'The enemy we could not buy or break was the aristocratic individualism of the ordinary citizen of the West. If only we had hanged—as Himmler was always itching to do—all those outdated legalists, with their squawk about moral dignity, then our movement would have swept the world.'

"It has become quite current among enthusiasts for regimentation to belittle those who scrutinize the means adopted for an end as 'legalistic.' If to be legalistic is to preserve liberties, if to be legalistic is to halt the aggrandizement of governmental bodies, then it should be to the honor of lawyers to be legalistic.

"Half a century ago in the State of Illinois, the Supreme Court proclaimed the independence of the profession of law from the legislature as well as the executive (In re Day, 181 Ill. 73). The development of the profession in England was there fully discussed, and the significant fact brought out that the Inns of Court were voluntary societies to which mandamus would not lie, but that the ancient and usual way of redress for any grievance was by appealing to the judges.

"The imposition by central authority of a new body of administrators, hearing officers, clerks, sub-clerks, and civil servants of every variety to administer, govern, and regulate the practice of medicine, would be a calamity. The same zealots who have recently been clamoring for the fingerprinting of every human being in this country will very soon be urging the carrying and exhibition of a license card by all physicians and their patients, stamped, endorsed, countersigned and certified by numerous authorities, before the patient can receive and before the physician can administer treatment.

"There is a limit to the load of regulations, orders, directives, reports, and the mountains of miscellaneous paper work with which the ordinary citizen has already become afflicted. There is a breaking point beyond which plunder in the pseudo-respectable guise of taxation becomes unbearable. To add to this the enforced paralysis of both ancient fellowships is unthinkable. The organized push for further regimentation must be stopped."

ACADEMY OF FORENSIC SCIENCES

During the last several years renewed consideration has been given to the creation of a national medicolegal association. Reference was made to this development in the report of the Bureau submitted to the House of Delegates at the St. Louis meeting. A meeting of a steering committee to consider such an organization was held in New York October 18, last year, and the chairman of the Association's Committee to Survey the Relationship of Medicine and Law, Dr. Alan R. Moritz, and the Director of the Bureau accepted membership on the committee and attended the meeting. After considerable discussion, it was the consensus that there was a need for the creation of a national organization devoted to matters of medicolegal significance and the committee voted to sponsor such an organization under the name of the Academy of Forensic Sciences.

Another matter considered by the committee related to the desirability of sponsoring at this time a national publication for the dissemination of information on developments in the field of the forensic sciences. Communications were read from two well known publishers advising against the starting at this time of a journal of this nature and the committee decided to accept the advice of these publishers. Representatives of the *Journal of Criminal Law and Criminology* indicated that any important material developed by the Academy of Forensic Sciences would be acceptable for publication in that journal and the committee decided to accept this offer.

A number of subcommittees were appointed to effect the organization of the Academy and these committees are scheduled to make reports at a meeting to be held next January in Chicago, at which it is contemplated that a number of important papers will be presented.

NEW COURSES IN LEGAL MEDICINE

Tulane University has this fall inaugurated a new law-science program to bring about an effective integration between the fields of law and medicine on the graduate and undergraduate levels. The medical school course in legal medicine is designed to acquaint students with the chief connections in which medical science may help in the administration of justice and the solution of social problems. The law school course in advanced evidence will deal with the functional use of the rules of evidence and the functional use of science in proof in civil and criminal litigation. The courses in both the law school and the medical school will be directed by Dr. Hubert Winston Smith, former Professor of Legal Medicine at the University of Illinois.

LAWS RELATING TO AUTOPSIES, CORONERS AND MEDICAL EXAMINERS

Laws were enacted during the year in a number of states relating to autopsies and to the office of coroner and medical examiner. A new Arizona law provides that when any person has knowledge of the death of a human being in a case in which no physician was in attendance at the time of death, the person must immediately report this fact to the nearest peace officer, who shall cause an investigation to be made and report the results of such investigation to the coroner. The coroner may then direct the medical examiner or any other qualified physician to make such examination of the body as may seem necessary to determine the cause of death.

A prior Connecticut law permitted a coroner to determine whether or not a death was caused by the criminal act, omission or carelessness of another and to determine whether or not the cause of death was so obscure as to warrant an autopsy. A 1949 amendment requires both the coroner and the medical examiner to make such finding. Another Connecticut law authorizes the medical examiner along with the coroner to order an autopsy and requires that such autopsies, whether ordered by the coroner or the medical examiner, shall be performed only by certified pathologists. Any physician duly licensed to practice medicine in the state who is "a member in good standing of the American board of pathologists" shall be entitled to certification as a certified pathologist.

Prior Maryland laws have permitted the appointment of a chief medical examiner and two assistant medical examiners. A new law authorizes and directs the appointment of a toxicologist as well. Existing New York laws relating to Westchester County and permitting the appointment of a medical examiner therein were amended so as to grant the option of appointing a medical examiner or a pathologist-medical examiner. A third New York law which also relates to the County of Westchester would permit certain cities, towns, villages and special districts therein to establish a county laboratory district under the direction of the pathologist-medical examiner. Such examiner must be a pathologist and microscopist experienced in his profession and meeting the minimum qualifications of professional and administrative education and experience set forth by the public health council. A Rhode Island law amends the existing law relating to medical examiners by stating the qualification of such medical examiner in more detail. The chief medical examiner must, for example, be a doctor of medicine, qualified in pathology, and having had at least one year of medicolegal training. All assistant medical examiners or county medical examiners must be doctors of medicine.

In California a new law makes it a misdemeanor for any person to perform an autopsy on a dead body without having first

obtained the written authorization of the coroner or other authorized public officer or of the person who has the right of disposition of the body. A new Kansas law authorizes a county coroner, in instances in which he feels that an autopsy should be made of the body of some deceased person, to direct a physician or surgeon to perform such autopsy, unless the coroner himself is a physician or surgeon. In such case he may perform the autopsy himself. The law also provides that an autopsy may be performed on the body of any deceased person by a physician or surgeon who has been authorized to do so in writing by the decedent during his lifetime or by the decedent's surviving spouse or by an adult child, parent, brother or sister of the decedent. A Montana law authorizes autopsies on dead bodies in cases where dissection, autopsy or post-mortem examination is directed or authorized by the last will and testament of the deceased and also in cases where the husband, wife or next of kin shall in writing authorize such an examination for the purpose of ascertaining the cause of death. All such autopsies and post-mortem examinations must be performed by a physician or surgeon duly licensed by the State Board of Medical Examiners. A Wisconsin law provides that consent for a licensed physician to conduct a post-mortem examination shall be deemed sufficient when given by whichever one of the following has assumed custody of the body for the purposes of burial: father, mother, husband, wife, child, guardian, next of kin or a friend or person charged by law with the responsibility for burial.

The Bureau continues to cooperate with the Committee to Study the Relationship of Medicine and Law in its efforts to promote a modernization of the law relating to coroners. During the year the Chairman of that Committee, Dr. Alan R. Moritz, and the Director of the Bureau had a conference and much correspondence with the Chairman of the Council of the National Municipal League, Mr. Richard S. Childs, who has suggested that the organization he represents desires to assume as a part of its activities more active participation in the development of adequate and scientific procedures to disclose the causes of deaths occurring under suspicious circumstances.

The National Municipal League will hold a National Conference on Government in St. Paul, Minnesota, November 28-30, of this year. In connection with this conference, Mr. Childs has planned a symposium on a proposed model state medical examiner law. Dr. Moritz and the Director of the Bureau have been invited to participate in this symposium.

STATE LEGISLATION IN GENERAL

A summary of state laws of interest to physicians enacted during 1949, prepared by the Bureau, will be published in THE JOURNAL in the near future. Reference is here made to some of the more important enactments.

Socialized Medicine.—During the year ten states adopted either joint or simple resolutions petitioning the Congress not to enact any law which would provide for compulsory health insurance: Alabama, Arkansas, Delaware, Florida, Maryland, Michigan, Nebraska, Tennessee, Texas and Utah. Another state, Washington, by a simple House resolution commended the President "for his courageous fight in behalf of the health of the people."

Premarital and Prenatal Laws.—Premarital examination laws were enacted in Georgia and Texas. Such laws have been enacted in thirty-nine states. Prenatal examination laws were enacted in New Mexico, North Dakota and Texas. Forty-one states have enacted laws of this kind.

Basic Science Acts.—A new basic science act was passed in Texas, bringing the total to eighteen states, the District of Columbia and Alaska. An amendment to the Arkansas basic science act exempted resident practitioners of chiropractic licensed prior to March 22, 1948 from its provisions. Prior to this date, apparently, the State Board of Chiropractic Examiners had issued reciprocity certificates to applicants therefor without first requiring them to present a certificate from the Board of Examiners in the Basic Sciences. It was to validate these licenses which the State Supreme Court had held to have been unlawfully granted that the legislature amended the basic science act as indicated.

Other Laws Relating to Limited Practitioners.—A chiropractic examining board was created in Texas. By this law, chiropractic was defined as the employment of objective or subjective means, without the use of drugs, surgery ,roentgen therapy or radium therapy, for the purpose of ascertaining the alinement of the vertebrae of the human spine ,and the practice of adjusting the vertebrae to correct any subluxation or misalinement. In Nevada chiropractic was redefined to mean the science of palpating and adjusting the articulations of the human spinal column by hand only. A Maryland law prohibits chiropractors from practicing obstetrics.

A state board of naturopathic examiners was created in Texas. Naturopathy was defined as "that philosophy and system of healing art embracing prevention, diagnosis, and treatment of human ills and functions by the use of several properties of air, light, heat, cold, water, manipulation with the use of such substances, nutritional as are naturally found in and required by the body, excluding drugs, surgery, roentgen and radium therapy, and the use of x-ray equipment."

An amendment to the Arizona osteopathic act permits osteopaths to practice major surgery after having two years of surgical training in a hospital approved by the state osteopathic board of registration and examination in medicine and surgery. A Wisconsin law provides that osteopathic and medical applicants shall be given the same examination in all subjects and issued licenses authorizing equal rights.

Washington created an examining committee for physical therapists. The new law defines physical therapy as the treatment of any bodily or mental condition of any person by the use of the physical, chemical and other properties of heat, light, water, electricity, massage and therapeutic exercise and posture and rehabilitation procedures. The use of roentgen rays and radium for diagnostic and therapeutic purposes and of electricity for surgical purposes, including cauterization is prescribed. A physical therapist is declared to be a person who practices physical therapy, as defined, under the prescription, supervision and direction of a person licensed to practice medicine and surgery.

Medical Practice Acts.—Arizona, Idaho, Nevada, South Dakota and West Virginia enacted general revisions of their existing medical practice acts. The South Dakota revision creates a composite state board of medical and osteopathic examiners. This board, one member of which must be an osteopath, will examine all applicants in the same manner except that medical applicants will be examined in the practice of medicine and osteopathic applicants in the practice of osteopathic medicine. Licenses must state whether the licensee is permitted to practice medicine and surgery or osteopathic medicine and surgery. In addition to other changes mentioned elsewhere in this report, the Arizona revision provides for a licensing board composed of physicians only. The prior board had osteopathic representation. The Idaho revision provides for a separate state board of medicine and defines the term "practice of medicine" in a more detailed manner than did the prior law. The Nevada revision contains provisions for the examination and licensure of limited practitioners. The West Virginia revision created a composite board with chiropody and chiropractic representation, provided for the biennial registration of licentiates and provided regulations for the examination and licensure of chiropodists and chiropractors. Arizona, Idaho, Nevada and Pennsylvania now authorize the use of the injunctive process to restrain the unlicensed practice of medicine. The new South Dakota law also permits the board to grant temporary licenses for a period not to exceed four years on a finding that an urgent need exists in any part of the state. The license will permit practice only in the particular area designated. California and Oklahoma also will now permit the issuance of temporary certificates, Oklahoma for residency purposes and California for service in state institutions under the Department of Corrections. In relation to the licensing of foreign graduates, California by a 1949 law authorized its board of medical examiners to disapprove a foreign medical school if the instruction therein was not equivalent to that required by the medical practice act and Maryland provides that foreign schools must have standards equivalent to those defined by "the Association of American Medical Col-

leges or the Intercollegiate Committee of the American Institute of Homeopathy" so far as "entrance requirements, standard of education and requirements for graduation" are concerned.

Ohio became the last state to exempt Christian Science practitioners from the provisions of the medical practice act by providing that "the treatment of human ills through prayer alone by a practitioner of the christian science church, in accordance with the tenets and creed of such church, shall not be regarded as the practice of medicine, provided that sanitary and public health laws shall be complied with, and that no practices shall be used which may be dangerous or detrimental to life or health and that no person shall be denied the benefits of accepted medical and surgical practices."

Rebates.—In Arizona, California and Washington new laws declare it to be a misdemeanor, or unprofessional conduct, for a licentiate to accept rebates of any kind as compensation for referring patients to any person, firm, association or corporation.

Prepayment Medical and Hospital Care Programs.—Oklahoma and Tennessee enacted laws authorizing the organization of nonprofit corporations with powers to provide for furnishing hospital and medical services or indemnity benefits. The 1945 Tennessee law provided for the formation of medical service plan corporations only. Pennsylvania amended the existing law relating to medical service plan corporations (1) by providing that medical service plans shall include the services of osteopaths and (2) by authorizing the organization of prepaid dental service corporations. A new South Dakota law permits cooperative associations to furnish medical services to members.

Testamentary Disposition of Body: Anatomic Acts.—Laws enacted in Alabama, Arkansas and Minnesota permit persons to dispose of all or parts of their bodies by will for the purpose of advancement of medical science or replacement or rehabilitation of diseased or worn out parts of other humans. An anatomy board was created in Maryland to have charge of certain dead bodies for the promotion and application of the medical sciences. An Oregon law authorizes the University of Oregon Medical School to use unclaimed bodies for a similar purpose.

Animal Experimentation.—Minnesota by a new law authorizes the state livestock sanitary board to license institutions desiring to obtain impounded animals for purposes of scientific investigation. A Wisconsin law authorizes dog pounds to dispose of unredeemed live dogs to the University of Wisconsin and Marquette University for scientific or educational purposes.

Contraceptives.—A South Dakota law prohibits the sale of contraceptives except by a registered pharmacist or a licensed physician and then only to persons over eighteen years of age.

Chemical Tests for Intoxication.—North Dakota and South Carolina amended their traffic laws to permit the use in evidence of chemical tests relating to the amount of alcohol in a person's blood or other bodily substance.

Barbiturates and Other Drugs.—Laws specifically prohibiting the sale of the barbiturates except upon an original prescription from a person licensed to prescribe and administer barbiturates were enacted in North Dakota, Ohio, Oklahoma and Texas. Iowa adopted a new "drug and cosmetic" act and the food, drug and cosmetic acts of Florida and North Carolina were amended. These laws in substantial effect place certain drugs on a prescription basis. In Florida these drugs are: "aminopyrine, barbituric acid, pituitary and thyroid." In Iowa these drugs are "aminopyrine, barbituric acid, cinchophen, dinitrophenol, sulfanilamide, pituitary and thyroid."

Joint Health Departments.—To enable smaller and less densely populated counties and communities to enjoy adequate public health facilities, six states enacted legislation authorizing the organization of various types of joint health departments. Arkansas authorizes the formation of county and district health departments. Massachusetts authorizes communities to cooperate in the formation of union health departments. Minnesota provides for the formation of county or multiple county health departments. New Hampshire authorizes the formation of district health departments and Washington of city-county health units. The Texas law authorizes cities, towns, school boards and school districts and other governmental entities to cooperate in the establishment of a coordinated health program including provisions for health and clinic centers, health services and facilities therefor.

A WORD OF APPRECIATION

This report may not be concluded without a very sincere expression of appreciation for the fine cooperation that the Bureau has received from constituent and component units of the Association and from many of its individual members. This cooperation has been most helpful. The Bureau expresses a hope that its assistance will be invoked to an even greater extent during the coming year.

Report of Bureau of Health Education

This annual report of the Bureau of Health Education covers the period from Sept. 1, 1948 through Aug. 31, 1949, and is in most respects similar to previous reports, since the work of the Bureau has been largely a continuation of previous assignments.

The most important unusual development was the absence of the Director, by direction of the Board of Trustees, to serve as a Visiting Expert to the Secretary of the Army as a Consultant on Public Health Practices in Germany under Public Health Branch, Civil Administration, Office of Military Government (United States). This trip has been covered in a mimeographed report of more than a hundred pages, including numerous exhibits, which was submitted to the Office of Military Government on the Director's return, copies of which were sent to each member of the Board of Trustees.

The Director left Chicago on March 17, 1949, and, after reporting to Washington for briefing and some delay in sailing from New York, arived at Bremerhaven on April 4. Headquarters were finally established at Bad Nauheim.

With Bad Nauheim as a center, each of the five principal administrative divisions under American control in Germany were visited in turn, namely, Wurttemberg-Baden, Bavaria, Berlin, Hesse and Bremen. Side trips into the British zone were made to Cologne, en route to Bremen, and Kiel and Hamburg from Bremen. Thus every important section of Germany was visited. Studies were made in 25 important cities and a number of lesser localities, such as villages and counties. The study covered practices in public health departments, voluntary health agencies, teacher training institutions and public schools, to the extent that the latter touched the field of health education. Superficial studies were also made of insurance systems and of medical education so far as these touched on public health practices.

In general, the German group was found to be suffering from shortages of money, personnel, space and transportation and from the cultural lag due to seventeen years of successive retardation under Nazi domination, war, military defeat and postwar poverty. Devotion to authoritarian methods and a total lack of appreciation of democratic procedures render the situation in Germany extremely complicated and not very promising from the standpoint of anticipated progress. The German officials who have been approved by Military Government are looked on with suspicion by many of their colleagues and some sections of the population. The United States Government, after initiating many projects, is now curtailing its activities, and there seems great likelihood that personnel will be cut until the maintenance of the necessary advisory staffs to assure progress will become impossible. In that event, it is probable that Germany will revert to prewar methods and American occupation efforts will largely have been wasted.

It is impossible at this time to assess the values which may have accrued through contacts between the Director, as representative of American medicine, and the German physicians and educators encountered. It is likewise impossible at this point to evaluate the possible influence of his project on German public health practices. The recommendations in the report of the Director were incorporated by the Chief of the Public Health Section, Civil Administration Division, in his recommendations for the fiscal year 1950 to 1951.

The Director returned home by way of England to observe health education procedures in that country.

During the absence of the Director the work of the Bureau was effectively carried forth under the direction of the professional staff and with the excellent cooperation of the clerical employees.

Immediately on the Director's return from Germany, he was notified that the Board of Trustees had designated him Editor of *Hygeia*.

New and enlarged quarters have been assigned to the Bureau. Included in these quarters is a sound-proof recording room, excellently equipped for recording programs off the air and in the studio and for relaying programs to the office of the Secretary and General Manager and the Director of the Bureau, as well as for transferring programs from tape to tape, records to tape, or air to tape. Television reception is also provided.

QUESTIONS AND ANSWERS

Individual letters received and answered in the department of the Bureau which handles medical inquiries from laymen totaled 11,146 from Sept. 1, 1948 through Aug. 31, 1949. Although many communications contained as much as four or five such questions, no attempt has been made to determine the exact number on that basis. It may well be in the neighborhood of 30,000 questions. This total represents a large increase over that for the preceding period and represents a definite upswing in interest. Although there might be a tendency to attribute this increase to current discussion of medical services, breakdown of the questions does not support such a conclusion. Actually, the subject of medical practice was in fourteenth place, which is in decided contrast with the previous year.

At the same time, there was a distinct upswing of interest in the American Medical Association, its organization and activities. In first place among the questions were those on cancer, with allergy next in line. Among other leading subjects were mental hygiene, alcohol and diabetes.

There is a definite parallel between the trends observed and various activities that have been given emphasis in newspapers and popular magazines. The cancer detection campaign, increased emphasis on mental hygiene, the problems of alcohol and diabetes detection undoubtedly served to stimulate a desire for more information on those subjects. It may be noted in passing that there has been a rising interest in the problem of chronic rheumatism and arthritis.

LOAN COLLECTIONS

A tremendous increase in requests for loan collections of *Hygeia* articles was experienced during the past year. A total of 126 applications were serviced, compared with 51 for the previous year. Review of the breakdown discloses that 69 requests came from physicians, compared with 39 in the earlier period. It is believed that this is evidence of the increasing demand on the part of lay groups for medical discussions by physicians. The fact that these collections present authoritative information written in popular language makes it possible for physicians to discuss current medical topics in terms readily understood. It is believed that this is an important contribution to promotion of friendly relationships between physicians and the general public.

Requests for loan collections from the general public also increased. Most of these were from health education workers or from persons developing health education studies in clubs or other organizations. However, there was an appreciable amount of interest at the college level, applicants drawing on the assembled material in loan collections for preparation of special assignments in health education.

Requests for loan collections come from virtually all areas, with 28 states represented. It is recognized that many state medical associations now have excellent facilities for physician members who have been invited to speak before lay audiences. The Bureau of Health Education makes no pretense of being in competition with such a development, but instead believes that it should be encouraged. On occasion, loan collections have been sent to state medical association headquarters for distribution to medical speakers.

RADIO

National Broadcasting Company.—The network program, "Your Health Today," was reduced from 30 minutes to 15 minutes and from 26 weeks to 18 weeks. At the end of the 18 weeks, by special request of NBC, the program was extended throughout the calendar year 1949 and was still in progress at the end of the period covered by this report. In the early months the programs consisted of about 35 per cent remote pickup talks by representatives of medical societies and medical schools detailing medical progress and medical news. Later a modified dramatic form, somewhat similar to the Dr. Riggs' programs previously broadcast, was adopted.

Transcriptions.—During the year the series of electrical transcriptions entitled "Guardians of Your Health" was remade from new scripts. One new series was added to the transcription library, namely, "The Story Behind the Discovery," a dramatized series, with music, on animals and medical research.

Special Broadcasts.—Special broadcasts included those at the Interim Session in St. Louis in December 1948, and at the Annual Session in Atlantic City in June 1949, as well as at the Rural Health Conference in Chicago in January 1949.

Radio and television activities during the 1949 session at Atlantic City were many and varied. Although Atlantic City has no key network radio stations, many network programs were made possible by means of tape-recorded interviews which were made in a studio set up in the convention hall. These tape recordings were edited and sent to such program centers as New York and Chicago for network broadcast. In addition, special telephone lines were installed to carry some broadcasts directly to the networks.

The "Nancy Craig Program," the American Broadcasting Company's outstanding series directed to women, moved to Atlantic City for two days, devoting its full facilities to coverage of the convention and continuing this coverage for a third day from New York. These were 30 minute broadcasts on the full ABC network and were also heard internationally over the "Voice of America."

In addition, Miss Craig recorded two additional broadcasts, one of which was aired on July 20 and the other on August 2. Her enthusiasm for what she saw at the convention has opened her program for many future American Medical Association programs on this series.

In all its efforts, the Association enjoyed excellent cooperation from stations and networks. At the present time it is the policy of all networks not to carry "convention coverage" as such; however, they were most receptive to program ideas tailored for their established series.

TELEVISION

Although no sustained program in television was carried out by the Bureau of Health Education, nevertheless during the year there was a continuation of activities in this new field of health education.

The regular weekly series which had been produced in cooperation with television station WBKB, Chicago, was continued from Sept. 3 through Oct. 8, 1948. Outstanding among programs presented during that period was one in which Harold Russell, the amputee who had the lead part in the motion picture "Best Years of Our Lives," took part; and a program dealing with "blue baby" operations, in which Dr. A. C. Ivy, head of the Colleges of Medicine, Pharmacy and Dentistry, of the University of Illinois, served as interpreter and discussed the basic problems with the aid of special charts prepared by the Bureau of Exhibits.

At the Interim Session in St. Louis, three television programs were presented.

Since the early part of 1949, the Bureau has participated at irregular intervals in a half-hour television program over WGN-TV, Chicago, entitled "Woman's Magazine of the Air." Special attention has been given to selection of programs of interest to that type of audience.

A special television broadcast was done over NBC from New York on Thursday evening of the week following the Annual Session in Atlantic City and as part of convention coverage. This was the first network medical telecast in history and was

V 14 1949

carried over the coaxial cable as far west as Chicago and St. Louis. The show was titled "Your Good Health and the Mighty Atom."

HEALTH AND FITNESS

The work of the consultants in health and fitness continues to be concentrated primarily in the field of school health services, school health education and healthful school living. More and more medical societies and associations, departments of education and departments of health are displaying increased interest in school health and calling on the consultants for service in connection with the development and expansion of school health services in the various states and in local communities.

During the past year the two consultants in the Division accepted 64 invitations to address groups or take part in conferences, workshops and institutes in 33 states. Twenty-one of the engagements involved participation in annual meetings of health and educational organizations. The division representatives took part as consultants in 40 conferences or meetings on health education. Ten trips were made to consult with school or college authorities on school health problems and policies.

Suggestions came to the Bureau from many sources that the Conference on Physicians and Schools first held in 1947 be repeated at about two year intervals to stimulate further state and local action and to evaluate progress made. Consequently the Board of Trustees gave approval to the scheduling of the Second National Conference on Physicians and Schools at the Hotel Moraine, Highland Park, Ill., Oct. 13 to 15, 1949. Acceptance of invitations to send delegates by a large proportion of state medical societies and associations, state health departments, state education departments and national health agencies assured a good attendance.

Three publications continue to be "best sellers" among the bulletins on school health distributed by the Division. "Physicians and Schools," the report of the 1947 Conference on this subject; "Health Appraisal of School Children" and "Suggested School Health Policies" apparently fill a real need and together make up a fairly complete summary of principles involved in the school health program. As a result of the recommendations set forth in these publications, many state and local medical societies have appointed school health committees or designated already existing committees as liaison groups to advise with school administrators and health department officials in the development of school health policies. A large number of state medical societies are now represented on state school health councils, and many are participating in sponsoring conferences and meetings on school health.

The Division is now engaged in making a survey of school health services on a nationwide basis. Questionnaires addressed to all constituent medical societies were designed to determine the extent of medical society participation in local school health programs. An excellent return of some 1,200 responses from the nearly 1,900 societies queried will make the findings and their eventual reporting of real significance.

The Consultants have given assistance to the Joint Committee on Health Problems in Education in preparation of statements on Health Education—A Text for Teacher Education; The Organization and Function of the Joint Committee; Handicaps Affecting Young People in Making Social Adjustments; The American Medical Association and School and College Health Programs; Choosing Medicine as a Career, and How to Choose a Doctor.

In addition to these efforts the consultants addressed various Parent Teacher Associations, Child Study Groups and similar organizations. They attended nine meetings of national committees of which they are members and have participated in the work of numerous committees dealing with health problems.

One of the consultants, Dr. Fred V. Hein, holds the office of secretary on the Joint Committee on Health Problems in Education, while the other, Dr. Donald A. Dukelow, is secretary of the Health Education Section of the American Public Health Association.

In accordance with the policy of the Bureau the consultants' services are made available on invitation from medical societies and associations, state departments of health, state education departments and other reputable organizations interested in school health and fitness.

For the third successive year the consultants are continuing to prepare a series of "Suggested Discussion Questions" to accompany each issue of *Hygeia*. The consultants are also called on to review a considerable number of films and other audio-visual aids for use in schools as well as to make suggestions on health education curricula and to review articles on various health and fitness subjects scheduled to appear in national periodicals in the field.

During the year a second exhibit on school health, entitled "Physicians and Schools," which portrays the physician's place in the school health service program, was prepared and will be displayed at the Second National Conference on Physicians and Schools and at the annual meeting of the American Public Health Association in New York, October 23 to 28, and then will be available for loan to medical societies and associations for use at appropriate meetings. The first exhibit prepared by the Division, entitled "Health Appraisal of the School Child," is still being used at state medical association meetings and is available for use in places where the display has not previously been shown.

BUREAU PUBLICATIONS

Distribution of Bureau publications through the Order Department during the period from Sept. 1, 1948 through Aug. 31, 1949 was 244,477. In addition, the Bureau sold 68,300 reprints direct to quantity purchasers, making a total of 312,777.

On request of this Bureau, the title of the catalog of technical publications prepared by the Order Department is being changed from "Publications of the American Medical Association" to "Technical Publications of the American Medical Association." The former title gives the impression that the catalog includes all Association publications, whereas a great many other publications are available and listed in a catalog released annually by the Bureau. Both catalogs will from now on carry prominent mention of the availability of the other.

MEETINGS AND CONFERENCES

The Bureau staff attended meetings and addressed audiences in 25 states and participated in 85 conferences and committee meetings during the year.

COOPERATIVE RELATIONSHIPS

Joint Committee on Health Problems in Education of the National Education Association and the American Medical Association.—The annual meeting of the Joint Committee was held at the Chicago offices of the American Medical Association March 14 to 16, 1949.

The Committee elected George M. Lyon, M.D., Chairman; Mabel E. Rugen, Ph.D., Vice Chairman, and Fred V. Hein, Ph.D., Secretary for the following year.

Principal actions by the Committee were as follows:

(1) Recommended to the National Education Association that at the annual N. E. A. meeting state delegates be appointed to meet with Joint Committee representatives to discuss and submit school health problems for the Committee's consideration.

(2) Appointed a subcommittee to give further study to the problem of coordinated classroom lighting.

(3) Reviewed a preliminary draft of a statement on the "Organizational Structure and Function of the Joint Committee" and approved the report, subject to revision.

(4) Appointed a subcommittee to study the scope of the problem and the proper role of the Joint Committee in the development of a "Statement on Health Services in Camping."

(5) Agreed to maintain representation in the National Conference for Cooperation in Health Education for another year.

(6) Reviewed, without taking action, the statement on "Relationships of Voluntary Health Agencies to the School Health Program."

(7) Ordered that the Secretary transmit the resolutions on "Allotment of Funds to Schools" and on the "Principle of Cooperative Planning of School Health Programs" to the secretaries of the Chief State School Officers Association and the Association of State and Territorial Health Officers and urge the support of these groups in implementing the resolutions.

(8) Considered the platform on "Adapted Physical Education" submitted by a committee of the American Association for Health, Physical Education and Recreation, with the decision that further study should be given to the statement.

(9) Appointed a subcommittee to prepare a statement dealing with the problems of sleep and rest for school children.

(10) Approved for distribution to schools, with minor revisions, pamphlets on medicine as a career in relation to vocational guidance, choice of a doctor in relation to consumer education and a statement on the relationship of medical societies and associations to school and college health programs.

(11) Reviewed the manuscript "Handicaps Affecting Young People in Making Social Adjustments" after subcommittee revision and approved plans for publication after further review and editing.

(12) Considered the first draft of the "Health Manual for Physical Education Teachers," made revisions through a subcommittee and approved the style to be used in preparing the manuscript for submission to the Committee for final approval before publication.

National Conference on Cooperation in Health Education.—There was one meeting of this group during the year, which was held at American Medical Association headquarters March 17 and 18. Mr. John L. Bracken, chairman, emphasized that the purpose now, as when the Conference was formed in 1937, was to obtain a meeting of minds of representatives of health and education organizations on a national level. There are at present 60 member agencies which contribute to activities of the Conference in one way or another. Invitations have been extended to additional departments of the National Education Association and other organizations to become members of the Conference.

United States Children's Bureau Advisory Committee on Maternal and Child Health Services.—A meeting of this committee was held in Washington, Sept. 15, 1948. The Children's Bureau adopted a new technic in the organization of its Advisory Committee on Maternal and Child Health Services. Designating the committee as a meeting of producers and consumers, it included representatives of many different organizations, such as universities, voluntary health agencies, social service groups, medical and hospital associations, medical schools, schools of nursing, the dental profession, farm groups, public health agencies, specialty societies, private practitioners, civic groups, labor unions, public relations representatives, veterans' groups and women's organizations.

The American Medical Association was represented by Dr. James R. Miller, a member of the Board of Trustees, and by the Director of the Bureau.

The policies of the Children's Bureau for expanded public health services through state cooperation were discussed along broad general lines. As usual, the meeting was employed as a sounding board by special groups, particularly those expressing adverse opinions of the medical profession for propaganda purposes.

National Society for the Prevention of Blindness.—The Board of Trustees has approved the Director's acceptance of membership on the Board of Directors of the National Society for the Prevention of Blindness.

National Committee on Boys & Girls Club Work (4-H Clubs).—The annual meeting was held at the Stevens Hotel, Chicago, Nov. 29, 1948. Dr. Fred V. Hein represented the Director at this meeting.

Committee on Organized Public Support of the President's Highway Safety Conference.—The Director was authorized by the Board of Trustees to accept membership on this Committee, which met in Washington, D. C., on March 18 and again on June 1 and 2, 1949. This latter meeting was the first full scale national meeting since 1946 and emphasized traffic safety in small communities and rural areas.

Section on Health Education.—The Medical Consultant in Health and Fitness was elected Secretary of this Section at the annual meeting in November 1948.

American Public Health Association Committee on Professional Education.—This committee continues its work in the development of standards of education and performance for public health personnel, accrediting of schools of public health and attacks on the grave questions of personnel shortages, security of tenure, political domination and inadequate remuneration, which seem to be the major obstacles toward the recruitment of properly trained personnel in adequate numbers.

Contrary to the American Public Health Association's policy, the Director of the Bureau of Health Education was reappointed for a third term on this committee.

Subcommittee on Evaluation of Committee on Planning in Health Education.—The Associate Director of the Bureau has been appointed to this subcommittee.

Subcommittee on Accident Prevention.—This subcommittee is allocated to the Committee on Administrative Practice and is under the chairmanship of Dr. Donald Armstrong. The Committee furthers accident studies and considers publications of materials in the field of accident prevention.

Following is a list of the committees on which the Director of the Bureau serves as the official representative of the American Medical Association:

Executive Committee, National Society for Medical Research.
National Committee for Traffic Safety.
Advisory Board on Health Services, American National Red Cross.
Prentiss Award Committee, Cleveland Health Museum.
Committee on Public Education, United States Office of Civil Defense.
Consultant in Radiological Defense, United States Office of Civil Defense.
Educational Committee, American Cancer Society.

United States Government Agencies.—The Bureau continues to cooperate, largely by correspondence, with government agencies. Materials or information have been furnished during the past year to practically every division of the Federal Security Agency, to the Department of State, the Atomic Energy Commission, the Farm Security Administration, the Department of the Interior, the Office of Military Government for Germany (United States) and the Army.

MISCELLANEOUS

The Bureau continues to compile information about attacks on and defense of medical research and to distribute it in response to requests.

The Bureau furnishes questions and answers to *Hygeia* for publication and checks all galley and page proofs for medical accuracy.

The Bureau continues its cooperation with the Woman's Auxiliary.

Twelve graduate students in health education spent from one to three days in the Bureau studying health education activities on a national scale. Arrangements for these students were made through the offices of the Division of Health and Sanitation, Institute of Inter-American Affairs, the School of Public Health, University of Michigan, and the School of Public Health of Yale University.

Report of Bureau of Exhibits

The work of the Bureau of Exhibits includes activities of various diverse groups.

The Committee on Scientific Exhibit, composed of Dr. Dwight H. Murray, Napa, California, Chairman; Dr. E. J. McCormick, Toledo, Ohio, and Dr. F. J. L. Blasingame, Wharton, Texas, is a committee of the Board of Trustees. It is charged with the administration of the Scientific Exhibit at the Annual and Clinical Sessions of the American Medical Association.

The Committee on Medical Motion Pictures, of which Dr. W. L. Benedict, Rochester, Minnesota, is chairman and Dr. John G. Bradley, Washington, D. C.; Dr. Morris Fishbein, Chicago; Dr. Chevalier L. Jackson, Philadelphia; Mr. Tom Jones, Chicago, and Dr. Dean F. Smiley, Chicago, are members, concerns itself with medical films for teaching purposes, maintains a rental library of films and makes itself available for consultation and advice on matters of film policy. Mr. Ralph P. Creer is Secretary of the Committee.

V 1
194

The various Councils and Bureaus at Association Headquarters cooperate in the preparation of Association exhibits for medical societies as well as for fairs and expositions.

Preparation and supervision of rooms in which are held the scientific meetings at the Annual and Clinical Sessions of the Association is accomplished with the advice and cooperation of the Council on Scientific Assembly.

THE SCIENTIFIC EXHIBIT
ANNUAL SESSION—ATLANTIC CITY

The Fiftieth Anniversary of the founding of the Scientific Exhibit was observed with one of the most outstanding groups of exhibits in the history of the Association. A committee from the Indiana State Medical Association, of which Dr. Thurman B. Rice was chairman, presented an exhibit on Dr. Frank B. Wynn, founder of the Scientific Exhibit, and showed some of the original pathologic specimens from the meeting in 1899. Another committee, headed by Dr. Frank W. Konzelmann, Atlantic City, with Dr. Peter A. Herbut and Dr. William P. Belk of Philadelphia as members, showed advances in pathology during fifty years, with practical applications of modern methods. A demonstration of the electron microscope was of special interest.

The special exhibit on fractures, which has been a feature of the Scientific Exhibit since 1926, attracted large and attentive audiences in each of the six demonstration booths. The committee, consisting of Dr. Kellogg Speed, Chicago, chairman, Dr. Gordon M. Morrison, Boston, and Dr. Frederick A. Jostes, St. Louis, was assisted by more than fifty demonstrators.

Three exhibit symposiums were extremely popular. The exhibit symposium on diabetes, organized by Dr. Howard F. Root, Boston, consisted of four carefully chosen exhibits. The exhibit symposium on arthritis, under the direction of Dr. W. Paul Holbrook, Tucson, Arizona, included twelve exhibits. The exhibit symposium on physical medicine and rehabilitation was sponsored by the Baruch Committee on Physical Medicine under a committee consisting of Dr. Frank H. Krusen, Rochester, Minnesota, chairman, Dr. Winfred Overholser, Washington, D. C., and Dr. Howard A. Rusk, New York. There were fifteen exhibits in the group, including several on speech rehabilitation. Aisles were crowded to the point of discomfort in all of these exhibits.

Eighteen sections of the Scientific Assembly sponsored groups of exhibits dealing with the various branches of medicine. Each Section elected a representative to the Scientific Exhibit to advise and consult with the Committee on Scientific Exhibit, and the time and energy which these Section representatives contributed was of immense value. There were 365 applications for space, of which only 210 could be accepted, largely because of the limited floor area available.

Two motion picture theaters were maintained in conjunction with the Scientific Exhibit, where continuous showings of films were made throughout the week. Applications were submitted to show 106 films, of which 34 were selected after previews. Each picture was shown once each day. The total attendance for the two theaters was 10,117.

Awards were made to twenty exhibits, including six medals, eight certificates of merit, four honorable mentions, one certificate of appreciation and one special mention. The Committee on Awards consisted of Dr. Roger I. Lee, Boston, Chairman; Dr. L. H. Garland, San Francisco; Dr. J. Duffy Hancock, Louisville; Dr. John E. Rauschkolb, Cleveland, and Dr. Derrick Vail, Chicago.

THE SCIENTIFIC EXHIBIT
INTERIM SESSION—ST. LOUIS

The Scientific Exhibit at the Second Interim Session was highly successful. Seventy-one exhibits were presented, the subjects being correlated with the clinical presentations, including obstetrics, pediatrics, poliomyelitis, arthritis, roentgen diagnosis, laboratory diagnosis, hypertension, hematuria, diabetes, dermatology and cancer. Special mention is made of the excellent group of exhibits on laboratory diagnosis, physical medicine and rehabilitation and cancer.

The exhibits were selected for their special interest to the physician in general practice. Several of the exhibits had been shown at previous meetings but were considered worthy of a second presentation.

Motion pictures were shown for a three-hour period each day in a room adjoining the exhibits, the program consisting of nine films selected for their suitability.

The Interim Session was designed primarily for the physician in general practice. In order to determine the attitude and desires of physicians who attended the St. Louis Session, a questionnaire was sent out at the close of the meeting, with the cooperation of the Council on Scientific Assembly. Five hundred physicians whose names were selected at random from the registration list were asked to give their critical opinions of the scientific program—what they liked, what could have been improved or what could have been omitted. Replies received from 390 physicians have been tabulated as follows:

	General Lectures	Clinical Presentations	Scientific Exhibit	Television	Motion Pictures
Excellent	203	190	209	175	148
Should be increased	77	115	69	115	75
Should be smaller	15	10	28	8	15
Could be omitted	23	4	6	25	27
Total	318	319	357	323	265

ASSOCIATION EXHIBITS

The Bureau of Exhibits interprets the activities of the American Medical Association in visual form, both to the medical profession and to the public. Members of the Bureau's staff, working in cooperation with the different Councils and Bureaus at Association headquarters, show the most recent developments in scientific medicine at medical meetings and at fairs and expositions to hundreds of thousands of persons annually.

There are distinct advantages in the visual form of presentation in that the visitor may spend as much time as he wishes in studying the subject, and the impressions that he receives are more lasting. The attendant at the booth is available to answer questions in detail and to discuss the problem at length. The visitor appreciates this opportunity of getting complete information, as attested by numerous statements, both written and oral.

This work has gone forward during the year on a basis requiring a minimum of expense. Thirty-eight exhibits are now available for loan purposes.

Medical Exhibits.—Twenty-four medical exhibits were scheduled during the year for seventeen meetings of state medical associations and other similar groups, including dental, pharmacal and allied societies. In many instances no attendant from the headquarters accompanied the exhibits—demonstrations being left to local committees.

The purpose of these exhibits is the maintenance of professional relations between the physicians of the country and the American Medical Association.

Health Exhibits.—The demand for health exhibits at fairs, expositions and other public gatherings has increased. There are several advantages in medical participation at such places—audiences are ready-made, involving a relatively small expense in presenting the health message; people are in receptive moods, making it easy to get the message across, and medical organizations appear before the public as scientific and educational institutions.

Opportunities to show health exhibits are numerous, requests coming from many varied sources. The possibilities are enormous, and at a comparatively slight expenditure, millions of people could be reached. Besides fairs and expositions, which are held annually in numerous communities, invitations have been received from special lay groups with the offer of free space. The "Hall of Health" has been suggested often, as well as the "Train of Health," using railroad cars, and the "Parade of Health," using automobiles. These opportunities to disseminate health information and improve public relations should not be disregarded.

Sixty-seven health exhibits were scheduled for thirty-eight fairs, expositions and meetings during the year. Such exhibits were sent out on a loan basis, the recipients being responsible for the expense of transportation, installation and demonstration.

Requests from groups other than medical societies were referred to the local state or county medical societies for

approval whenever necessary. Advice and counsel of the Bureau of Health Education was sought to the end that the health education activities of the Association be administered with intelligence and economy.

A new pamphlet describing health exhibits available from the American Medical Association is in the course of preparation.

MUSEUMS

Cooperation has been maintained with the several health museums of the country, all of which are doing excellent work.

The Museum of Science and Industry in Chicago, with an attendance of 1,500,000 persons annually, devotes much space to medical exhibits. The American Medical Association has on display several exhibits originally prepared for the Century of Progress Exposition in 1933 and the California-Pacific Exposition in 1939. Museum policy made it necessary to remove some of these which were prepared nearly twenty years ago, the material either being discarded or lent to other institutions for rehabilitation. The Association exhibits still on display, while still serviceable, are getting old and eventually will need replacing. Dr. Thomas G. Hull, Director of the Bureau of Exhibits, serves as executive director of the health section of the Museum of Science and Industry.

The Cleveland Health Museum has cooperated in an excellent manner. This institution, organized by the Cleveland Academy of Medicine, is devoted entirely to health subjects. During the year it has been the repository of a considerable number of health exhibits no longer serviceable for loan purposes, but which could be refurbished there and placed on display. A question and answer service has been maintained with the cooperation of the Bureau of Health Education.

The Dallas Health Museum, strategically located in one of the buildings at the Fairgrounds in Dallas, is operated with the cooperation of various medical groups. Several exhibits from the American Medical Association are on display and close cooperation has been maintained.

COMMITTEE ON MEDICAL MOTION PICTURES

The Committee on Medical Motion Pictures has assumed a position of leadership in the field of medical motion pictures. It is rendering a valuable service to the medical profession of the United States, and its advice is being constantly sought by numerous agencies in other countries.

Film Library.—Nineteen hundred and forty-two films were lent to medical societies, medical schools, hospitals and other medical organizations from September 1, 1948 to September 1, 1949. This represents an increase of 354 shipments over the previous year, much of it being due to the enlarged employment of films by medical societies and medical schools.

Nine new titles were added to the Film Library, making a total of 220 prints of 61 titles. Eight films were withdrawn because they had become obsolete. Beginning January 1, 1949, a small service charge (approximately $1.00 per 400 foot reel) was made, which in no way decreased the demand for films. Income from this source amounts to nearly $300.00 a month.

Film Reviews.—The reviews of medical films published regularly in THE JOURNAL is one of the most important services rendered by the Committee. These reviews are widely read both in this country and abroad. The reviews have been reprinted in booklet form, the 1949 edition containing 144 reviews published from September 1946 to January 1, 1949, together with a classified table of contents and a list of medical motion pictures in the film library. Distribution of the booklet has been wide, copies going to county and state medical societies and medical schools, with more than one thousand individual requests.

Source List of Medical Films.—The source list of medical motion pictures was revised during the year, and now contains seventy-two sources of medical films. It also includes six sources of catalog material, as well as a list of five institutions which publish evaluated lists of medical motion pictures. Lists of motion pictures dealing with specific subjects, such as cardiology and preventive medicine, have been prepared, the number of subjects totaling 125. These lists are in great demand, many hundreds of copies having been distributed, and they are available to the medical profession on request.

Source List of Health Films.—The source list of health films has been revised and brought up to date and now includes forty-three commercial organizations and educational institutions which distribute films dealing with health subjects. A list of twelve references to health film catalogs has been included.

Special Projects.—Through a special gran: from the Becton-Dickinson Foundation, a motion picture, entitled "They Also Serve," was produced, with a premier showing at the Annual Session in Atlantic City. This film deals with the physician's responsibility in the event of a major disaster and is of special interest to state and county medical societies. The picture has been well received by the medical profession, copies having been requested by various organizations in this country and abroad. A brochure designed to accompany the film has been prepared.

The 1948 Census of Hospitals and Report of Internships and Residencies contained four questions regarding the use of medical motion pictures and the availability of motion picture equipment. The results of this survey have been compiled, and a preliminary report was published in the Hospital Number of THE JOURNAL, May 7, 1949.

All films shown at the meeting of the American Academy of Orthopedic Surgeons were previewed in the projection room at American Medical Association Headquarters by special arrangement with the Committee on Medical Motion Pictures. This was not only a service to the orthopedic surgeons, but it afforded the Committee an opportunity to become familiar with the latest productions in that specialty.

Cooperation is being extended to the International-American Congress on Obstetrics and Gynecology in securing motion pictures from foreign countries for its meeting in 1950. These contacts are of mutual benefit.

Through a special arrangement with one of the medical fraternities at the University of Illinois, selected teaching films were shown at the fraternity house twice monthly during the school year. A questionnaire as to the effectiveness of each film was executed by each student and an informal discussion followed regarding the teaching value of the film.

Many conferences have been held with the Council on Medical Education and Hospitals in connection with the forthcoming survey of medical schools, and several pertinent questions dealing with the use of motion pictures in medical education will be included in the survey which is already under way.

Several sponsors and producers of medical films have contacted the Committee from time to time for advice and counsel regarding the production of medical films.

An increasing number of state medical associations are showing films as an integral part of their annual meetings. The Secretary of the Committee on Medical Motion Pictures has been consulted by many program chairmen relative to the organization of such programs and the availability of motion picture material.

Mobile Medical Film Projects.—The Bureau of Audio-Visual Instruction of the State University of Iowa, Extension Division, in cooperation with the Iowa State Medical Society, is planning a Mobile Medical Film Project, the purpose of which is to provide in-service training to practicing physicians in the State, especially in rural areas, through the use of medical films. The Committee on Medical Motion Pictures has been consulted on this project and is working in close cooperation with the Speakers Bureau of the Iowa State Medical Society and the University of Iowa.

MISCELLANEOUS ACTIVITIES

Members of the staff have continued to serve on numerous committees, to confer with many persons from the United States and foreign countries on matters pertaining to all methods of visual education and to prepare articles for publication, review books and address meetings.

During the year, Mr. George B. Larson joined the staff as Assistant Director of the Bureau. His experience and judgment in matters pertaining to medical organization have been a distinct contribution to the work of the Bureau.

Report of Bureau of Medical Economic Research

During the twelve months ending Sept. 30, 1949, 68,000 copies of printed Bureau bulletins were distributed, many of them through state medical associations. This is in line with the recommendation of the Reference Committee on Reports of Board of Trustees and Secretary to the House of Delegates at the St. Louis Interim Session in 1948. The Bureau mimeographs or planographs certain miscellaneous items, usually consisting of one or two pages; 25,000 copies of these miscellaneous items were sent out during the year. The number of bulletins and miscellaneous items distributed indicates that the Bureau of Medical Economic Research is now operating on a rather extensive scale. Because of questions raised by members of the House of Delegates, officers of state medical associations and university librarians, a list of the titles of bulletins published by the former Bureau of Medical Economics from 1931 to 1946, numbered 1 to 48, has been prepared. Bulletins 49 to 69 have been published since the name was changed to the Bureau of Medical Economic Research by the Board of Trustees in September 1946, when the present director was appointed.

During the past year bulletins 67, 68, and 69 were published. Briefly these three bulletins contain the following information:

Bulletin 67, "Four Recent Articles on Medical Economics." This is a reprint of four articles and five "current comments" which were prepared by the Bureau and which appeared in four issues of THE JOURNAL during the first four months of 1949. The first article is a progress report on the continuing study of medical service areas in the United States. The second article deals with the ages of physicians and the proportion of physicians to population in twenty-three leading nations. The third article shows that medical care prices have not risen nearly as fast as the cost of living. The fourth article deals with the causes of death among physicians and indicates clearly that the medical profession is giving to the general population at least as much and at least as good medical care as it is giving itself; that is, physicians do not live any longer than white males of the same ages.

Bulletin 68, "Misuse of American Medical Association Data": Various members of the House of Delegates have expressed to the Director their embarrassment at hearing or reading statements that "according to the Bureau of Medical Economics in 1939 families receiving less than $3,000 a year could not pay for their medical care." It is this statement on which was based the claim that four fifths of the American people cannot pay for medical care. The statement was so carefully refuted in Bulletin 68 that one of the four advocates of compulsory sickness insurance quoted in the bulletin wrote the Director that he would not again attribute this statement to the American Medical Association.

Bulletin 69, "An Analysis of the Ewing Report": Because the Ewing Report was so poorly organized, the Bureau chose to write three essays rather than present a formal book review covering everything mentioned in the report by Administrator Ewing to the President. These three essays are designed to answer the charges that we now have the knowledge and skills to prevent 325,000 deaths each year, that there will be a doctor shortage of something like 40,000 in 1960 and that the American people cannot afford to pay for their medical care. This bulletin should serve as an answer to past, present and future use of these frequently repeated statements which have been widely used by advocates of compulsory sickness insurance.

At the 1948 annual session of the House of Delegates the Bureau was requested to prepare a study of life insurance examination fees. The Bureau's report was presented to the House by the Board of Trustees at the 1949 annual session and referred to the Reference Committee on Reports of Board of Trustees and Secretary, which recommended, and the House approved, that a copy of the study be sent to the secretary of each constituent association for study. In addition the Secretary and General Manager authorized the sending of a copy to any county medical society on written request. The study analyzed the results of four questionnaires mailed to 240 life insurance companies by the Committee for the Promotion of Life Insurance Medical Education of the Association of Life Insurance Medical Directors. In brief, the $5 fee has remained unchanged for many years. The fee for the attending physician's statement varies between companies and between the different types of services rendered by the physician. Three large life insurance companies during 1949 have increased their entire medical examination fee schedules.

Cooperative activities with other departments at Association Headquarters continue to expand. During the year thirty-nine items were published in THE JOURNAL. These include book reviews, current comments, editorials and articles. The IBM section of the Bureau punched and tabulated the information from hospital questionnaires collected by the Council on Medical Education and Hospitals and prepared the tables which were published in the Hospital Number of THE JOURNAL. The Bureau has under way for the first time the preparation of the tables for the Internship Number of THE JOURNAL. Beginning with the Jan. 22, 1949 issue of THE JOURNAL, the Bureau has assumed the task of writing the annual "Death Editorial" concerning the causes of deaths among physicians during the preceding year. The Bureau has prepared punch cards and tabulations on which the first report of the Subcommittee on Mammary Cancer of the Therapeutic Trials Committee was based. The Bureau has also assisted the United States Department of Commerce by furnishing a random sample of physicians from the punch card file. Cooperation with the Woman's Auxiliary and the National Educational Campaign have been among the most heartening experiences of the Director during the past year. The eagerness of the officers of the Woman's Auxiliary to utilize the findings and publications of the Bureau has been most encouraging.

The Director made twelve speeches to a variety of organizations; Everett L. Welker, Ph.D., Associate in Mathematics, and Charles E. Bradley, Ph.D., Associate in Economics, each gave one address during the year.

The IBM machines and staff now occupy expanded and more convenient quarters on the fourth floor in the new wing of the Association's building. It has not yet been possible to complete the punch card inventory on all physicians in the United States, Canada and the United States possessions.

The Secretary and General Manager has asked the Bureau to undertake the task of billing THE JOURNAL and the various special journals. Sometime during 1950 subscribers and Fellows will receive bills in the form of punch cards similar to the forms used by a number of the leading magazines in billing their subscribers when the subscription expires. This operation will produce punch card files useful for other purposes. Information on Fellows and members of the Association will be punched into the basic three card file which the Bureau itself needs for research purposes.

During the summer the Board of Trustees authorized the Bureau to mail a selected list of Bureau bulletins to the larger high schools throughout the country. This operation will be completed during the fall and reported in the next annual report.

The Bureau staff has devoted considerable time to assisting the Association's Committee on Blood Banks in obtaining a list of the 1,500 blood banks in the nation and preparing a questionnaire which was mailed during the first week of October.

There are three continuing research projects on which reports should be in print some time during the next year. Rapid progress is being made on the study of medical service areas showing the distribution of physicians and patients throughout the nation. The phase of group practice currently being studied is the cause or reason for dissolution of groups existing in 1940 which are not now in existence. The third continuing project, in cooperation with the World Medical Association, is an international comparison of vital statistics.

Report of Bureau of Industrial and Personnel Relations

The Bureau of Industrial and Personnel Relations has attempted in previous reports to state its plans with respect to the broad field of personnel administration and to discuss its activities. It has been emphasized that a program would be tailored to the specific needs of the American Medical Association and would be evolved in the light of experience and the Association's particular administrative problems. The Bureau

both in theory and practice should and must perform a staff function, a service function to the several councils, bureaus, departments and committees. Reduced to the barest terminologic essentials, the ultimate objective of personnel management or administration, or whatever term is used to describe the field, is to obtain the most effective, efficient and economical use possible of available manpower, bearing in mind fair and just relations with the employees under conditions of employment that act as an incentive to the employee to help attain that end. All procedures utilized by the Bureau have been adopted with this objective in mind and are attempts to attain that goal.

ACTIVITIES WITH RESPECT TO OFFICE AND MECHANICAL OR SHOP PERSONNEL

The office personnel currently in the employ of the American Medical Association numbers 600, with a 1949 payroll of $1,777,732. The number of employees in the mechanical or shop departments is at present 250, with a 1949 payroll of $1,067,704.

The Bureau of Industrial and Personnel Relations performs the following functions with respect to the Association's office personnel:

1. Administration of salary administration program for office personnel whose salaries are under $5,000 annually based on equitable salary differentials and standard salary administration technics. This involves the application of job evaluation, merit rating and area surveys.

2. Formulation of personnel policy relating to overtime, vacations, sick leave, leave of absence and other matters of organizational control.

3. Analysis and interpretation of personnel statistical data such as turnover, staff expansion, overtime costs, absenteeism, tardiness, exit interviews and department payrolls with a view to making periodic reports to the General Manager and to department heads where indicated.

4. Preparation of organization analysis, indicating levels of authority, defining responsibilities, work flow and promotional opportunity.

5. Procurement, selection, testing and placement of office personnel.

6. Conducting of courses for first line supervisors in applied principles of good personnel management, work methods, human relations and the like.

7. Study and application of federal and state laws and regulations as they affect employee-employer relations.

8. Adjustment of employee grievances.

9. Follow-through on procedures called for or indicated in state unemployment compensation acts to reduce tax liability.

10. Administration of employee services, such as hospitalization and medical care insurance, employee counseling and others currently being developed.

11. Jointly with Council on Industrial Health conducts industrial health program.

The following functions with respect to the mechanical or shop personnel are performed by the Bureau:

1. (*a*) Active participation in industry-wide bargaining with the eight printing craft unions whose members are in Association employ and (*b*) independent handling of contractural labor relations with five other miscellaneous unions.

2. Administration of union contract provisions in the light of changing conditions in the American Medical Association printing plant because of changes in work flow, procedures and demands.

3. Conducts periodic staff meetings with printing production foremen to ascertain production facts, to appraise them of cost trends in their operations and to discuss ways and means of more economical and efficient production.

4. Analysis and comparison of American Medical Association unit printing costs with those of other printing organizations.

5. When indicated cost-wise, negotiates most advantageous contractual arrangements possible for contracting out certain Association publications.

6. Presents management's position in all employee grievances to the union and follows through with the appellate procedure established in union contracts.

7. Interprets federal and state laws, regulations and interpretive rulings as they affect management-union relations.

8. Administers provisions of sickness and disability insurance payments required by the contracts of seven printing craft unions.

9. Follows through on procedures called for or indicated in state unemployment compensation acts to reduce tax liability.

Report of Committee on Rural Health

The Committee on Rural Health has two immediate objectives: (1) the annual national conference for exploration and discussion of particular health problems, and (2) the promotion and formation of community health councils for the purpose of encouraging the citizens to help themselves to better health through organization for health education and subsequent action.

The national conference in February 1949 attracted over 600 registrants from practically every part of the country. Each year increasing numbers have attended this national forum on rural health and have participated in the discussion groups. The program of this Committee and the technic followed at the annual conference are developed through discussion with advisory members representing the major farm organizations. In 1948 the Committee on Extension Organization and Policy of the Association of Land-Grant Colleges was invited to name two of its members as advisors. Mr. Aubrey Gates of the University of Arkansas and Miss Gertrude Humphreys of West Virginia University were the appointees.

The recent employment of health education specialists by the extension departments of land-grant colleges has been an important factor in the Committee's second objective. The health specialists also are interested in forming community health councils as a means of promoting health education. The Committee welcomes this parallel activity, and wants to tie in with it. The medical profession and the extension departments are natural allies in this activity.

The Committee has prepared a new Handbook which will be distributed to the members of the House of Delegates at the Washington Session. The Handbook records what is being done for rural health within the states by the medical profession, the medical colleges, the extension departments of land-grant colleges, the councils and bureaus of the American Medical Association, the American Dental Association and the United States Public Health Service.

This record of what is being done in the Committee's fifth year reveals abundant evidence that remarkable progress is being made in the field of rural health. This progress is all pointed toward encouraging the citizen, through community organization, to solve his own problems, in his own way and according to his needs. This tradition of self reliance is still a dominant incentive among rural people. It gives every assurance that the Committee's Eleven-Point Program of utilizing all existing agencies and channeling their efforts through community organizations, such as health councils, will result in a level of rural well-being comparable to that of urban communities.

Conclusion

It is possible that the Board of Trustees will submit a supplementary report at the opening session of the House of Delegates covering a few items on which complete information is not yet available.

Respectfully submitted,

Louis H. Bauer, Chairman.
James R. Miller, Vice Chairman.
Edwin S. Hamilton, Secretary.
John H. Fitzgibbon.
Walter B. Martin.
Dwight H. Murray.
Edward J. McCormick.
Gunnar Gundersen.
F. J. L. Blasingame.

REPORT OF THE COUNCIL ON MEDICAL EDUCATION AND HOSPITALS

To the Members of the House of Delegates of the American Medical Association:

The major concerns of the Council on Medical Education and Hospitals during the past year have been with the Survey of Medical Education, the actions taken by the House of Delegates at the December 1948 and June 1949 sessions which were referred to the Council, efforts to provide more adequate financial support for medical education, a comprehensive re-evaluation of internship and residency training programs and the problem of graduates of foreign medical schools desiring to practice in the United States.

SURVEY OF MEDICAL EDUCATION

In 1947 the Board of Trustees authorized the Council to proceed with a comprehensive survey of medical education in the United States. With the approval of the Board of Trustees the Council arranged with the Association of American Medical Colleges to appoint jointly a committee of seven men experienced in medical education to conduct the survey and prepare and publish a report of its findings. The members of this committee are President Alan Valentine of the University of Rochester, Chairman, Drs. Herman G. Weiskotten, Joseph C. Hinsey, Victor Johnson, Arthur C. Bachmeyer, Dean F. Smiley and Donald G. Anderson, Secretary.

This committee was active throughout 1948 in planning the broad program for the survey. On January 1, 1949, Dr. John E. Deitrick, Associate Professor of Medicine, Cornell University, Medical College, was granted a leave of absence to assume the post of Director of the Survey. Later in the year, Dr. Robert Berson, Assistant Dean at the University of Illinois College of Medicine, was appointed Associate Director. The detailed plans for the conduct of the survey were completed during the first eight months of 1949. In September the visits to the medical schools were initiated. During the next two academic years, teams composed of two to three men will visit each medical school in the United States, spending approximately five to ten days at each school. At the conclusion of the field work a comprehensive report will be prepared and published.

The objectives of the study have been announced as follows:

To evaluate the present programs and determine the future responsibilities of medical education in its broadest aspects for the purpose of:

1. Improving medical education to better meet the over-all needs of the American people for:
   - *a.* The prevention of disease.
   - *b.* The restoration, so far as possible, to health of all those who suffer illness or injury.
   - *c.* The maintenance of the best standards of physical and mental health of all the people.
2. Assessing the degree to which medical schools are meeting the needs of the country for physicians.
3. Promoting the advancement of knowledge in the fields of medical science.
4. Better informing the public concerning the nature, content and purposes of medical education.

The study should encompass:

1. An inventory of the existing situation.
2. Determination of the need for changes and improvements.
3. Conclusions and recommendations based on the foregoing.
4. Proposals for ways and means of carrying out the recommendations.

Under the detailed plan worked out during the past year, the survey will concentrate on fourteen major aspects of the medical school's activities:

1. The objectives of the medical school (for each of the various fields in which it is active).
2. Organization and administration.
3. Physical facilities.
4. Finances.
5. Faculty.
6. Student body.
7. Curriculum and teaching methods.
8. Research.
9. Graduate training.
10. Postgraduate training.
11. Hospital relationships.
12. Community relationships.
13. Alumni activities.
14. Plans for future development.

On the basis of the program that has been developed, it may be predicted that the survey will make a major contribution to the further development of medical education in the United States in the years ahead.

REPORT ON MATTERS REFERRED TO THE COUNCIL BY THE HOUSE OF DELEGATES

At the December 1948 and June 1949 meetings of the House of Delegates several resolutions were referred to the Council. A summary of the Council's action on these resolutions follows:

Report of the Reference Committee on Medical Education, December 1948: This report stated in part, "In support of the activities of the House of Delegates of the American Medical Association in its attempt to redignify the general practitioner, your Reference Committee recommends that a re-evaluation of the basic teaching programs in the undergraduate medical schools and the overemphasis of specialty board certification be made by the Council on Medical Education and Hospitals."

Since a study of these problems constitutes an important part of the Survey of Medical Education, the Council believes that no separate action on this recommendation is necessary at this time.

In June 1949, the House of Delegates passed a resolution requesting the Council on Medical Education and Hospitals, "To investigate the feasibility of extending its inspection to all hospitals within the United States, granting approval to those which meet proper standards."

The Council now periodically inspects all hospitals approved for internship and residency training. There are approximately 1,500 hospitals in this category. In addition, the Council inspects each year a limited number of hospitals for registration. To inspect regularly all registered hospitals or all hospitals seeking registration would add some 5,000 institutions to the number now covered by the Council's inspection service.

At the June 1949 session the House of Delegates passed a resolution that:

"1. Graduate and postgraduate education for general practitioners should be made more widely available.

"2. Two year rotating internships especially designed for those who wish to train for general practice be set up as rapidly as may be possible."

The Council is in entire agreement with the intent and spirit of this resolution and is prepared to give full encouragement and support to institutions conducting or desiring to conduct such programs. Thus, a year ago the Council established, as a new category of residency training, standards for approved residencies in general practice. The response from hospitals interested in establishing such residencies has been gratifying.

FINANCIAL SUPPORT OF MEDICAL SCHOOLS

During recent years the Council has reported frequently to the House of Delegates that a major problem in medical education today is the need for more adequate financial support of the medical schools. In the last year's report, reference was made to the Council's participation with the Association of American Medical Colleges in an effort to enlist the support of leaders in many fields for the establishment of a national organization to secure voluntary funds for the support of medical education. Many individuals and groups have shown interest in the possibility of establishing such an organization. The feasibility of creating such an organization is being actively investigated, and in all probability the formation of such an organization will be announced within the next nine months.

Several bills providing for federal funds for the support of medical education have been introduced into the Eighty-First Congress. In June representatives of the Council testified before the committees of the House and Senate that were considering these bills. Later an opportunity was provided for representatives of the Council to join with other representatives of the health professions in a series of conferences with the professional staff of the Senate Subcommittee on Health. The purpose of these conferences was to advise the subcommittee as to how the proposed legislation could be improved to better meet the needs of the medical schools and the public. As a result of these conferences, Senate Bill 1453 was rewritten as a committee bill and reported favorably to the Senate with the unanimous approval of the Senate Committee on Labor and Public Welfare. The bill was passed by voice vote by the Senate on September 23, 1949. A companion bill H. R. 5940 had not yet been acted on by the House of Representatives Committee on Interstate and Foreign Commerce at the time this report was prepared.

While the Council is not entirely satisfied with the bill, it does incorporate several modifications suggested by the Council's representatives and it is a distinct improvement over any other bill for federal aid to medical education that has been introduced. The chief objection to the bill in its present form is that it provides that osteopathic schools will receive the same aid as medical schools.

The Council is aware that federal aid to medical education creates definite hazards to the continued freedom and independence of the medical schools. With few exceptions, however, the medical schools and their parent universities have expressed the opinion that, unless additional aid is provided, medical education in this country cannot achieve its full development. The legislation which has been passed by the Senate contains safeguards that should protect the medical schools from unwarranted interference in their affairs by the federal government. It must be recognized, however, that if federal officials should become determined to exercise control over the medical schools, these safeguards could be broken through or circumvented without great difficulty. Thus, if the pending measure is enacted into law, the continued independence and freedom of the medical schools will depend basically on the capacity of the federal officials administering the program to recognize that the interests of the nation will be served best if a policy of cooperation and not of domination is adopted.

The greatest safeguard against federal domination of medical education will be the avoidance of a situation in which the medical schools become totally dependent on the federal government for necessary funds. It is hoped, therefore, that the voluntary national organization referred to above will become a reality. Such an organization would possess resources to which the schools could turn for aid, should federal funds ever be offered on terms that were unacceptable. If this organization is established, the Council urges that the members of the medical profession give it their strong support both morally and financially.

APPROVAL OF HOSPITALS FOR INTERNSHIP AND RESIDENCY TRAINING

Since the end of the war, the Council in its annual report has regularly called attention to the rapid expansion in residency training that has been taking place. Before and during the war, the total number of residency positions in the hospitals in the United States numbered only a few more than 5,000. By April 1, 1947, this figure had increased to 10,422, by April 1, 1948 to 15,154, and by May 1, 1949 to 17,293. During this period, the number of hospitals approved for residency training increased from 616 to 1,187.

Two years ago the Council recognized that to administer efficiently its work of surveying and approving the greatly increased number of institutions conducting graduate training it would be necessary to enlarge its staff and to establish a special section on graduate training. This section was established in July 1948 under the supervision of Dr. E. H. Leveroos, Associate Secretary of the Council. As a result of the creation of a section that devotes its entire attention to graduate training, the staff of the Council is now able to visit more than three times as many hospitals each year as it did previously.

Even with this expanded organization, it was early apparent that the full time staff alone would be unable to achieve the Council's objective of resurveying, during the period July 1, 1948 to December 30, 1949, all hospitals approved for internship and residency training, as well as making an initial survey of institutions that had been granted temporary approval for residency training in the period immediately after the war. The Council established this objective because it recognized, together with the American Boards, the medical colleges and the various special medical societies interested in graduate training, that a number of approved hospitals were not maintaining high educational standards.

In order to complete the survey within the period established, the Council requested and received from the Board of Trustees authorization to appoint a number of regional representatives who would agree to take time from their practices or other duties to inspect hospitals in adjacent regions. Twelve regional representatives were appointed early in 1949 and have actively participated in the Council's program since that time. Some representatives have already visited all the hospitals assigned to them. The others will complete their visits by the end of the year. The work of these men has been of uniformly high quality. Many of the hospitals that they have visited have written to the Council expressing their appreciation for the advice and counsel provided. In giving generously of their time and effort these men have made a major contribution not only to the work of the Council, but also to the advance of graduate education in the United States. Following are the names of the men who accepted appointments as regional representatives and to whom American medicine and the Council owe a real debt of gratitude: Dr. Sandy Carter, Atlanta, Ga.; Dr. Charles S. Davidson, Boston; Dr. Thomas F. Frist, Nashville, Tenn.; Dr. Edgar Hull, New Orleans; Dr. Edwin Irons, Chicago; Dr. Manson Meads, Winston-Salem, N. C.; Dr. John Minor, Washington, D. C.; Dr. Louis B. Owens, Cincinnati; Dr. Conley H. Sanford, Memphis 3, Tenn.; Dr. A. B. Scoville, Nashville, Tenn.; Dr. Henry M. Thomas Jr., Baltimore, and Dr. Myron Weaver, Minneapolis.

Detailed statistics concerning the number of hospitals visited during the calendar year October 1, 1948 to September 30, 1949 are set forth in the section of this report entitled "Inspection of Hospitals and Technical Schools." These data may be summarized briefly by stating that since July 1, 1948 approximately two thirds of all hospitals approved for internship and residency training in the United States have been visited by a member of the Council's staff or by a regional representative. Prior to the publication of the Internship and Residency Number in the spring of 1950 the Council will have achieved its objective of inspecting all hospitals that were granted temporary approval and of resurveying all hospitals that had been approved prior to July 1, 1948.

The survey of hospitals approved for internships has been carried on concurrently with the survey of hospitals approved for residency training. At the St. Louis session in December 1948, the House of Delegates ratified a major revision of the "Essentials of an Approved Internship" as prepared by the Council. Early in 1949, these revised Essentials and a reprint of an editorial in THE JOURNAL summarizing the important changes in the Essentials were forwarded to all hospitals conducting internship training. Subsequently, individual letters were sent to hospitals whose reports indicated that they had failed to meet one or another of the new requirements. Hospitals already approved for internship training were informed that they would be allowed a period of one year in which to adjust their programs to the newly established standards.

It is well known that there is widespread dissatisfaction among hospitals and the medical profession over the failure of many hospitals to secure a full complement of interns because of the discrepancy between the number of internships offered and the number of interns available. It has been estimated that, if the current discrepancy between the number of internships offered and the number of interns available is to be corrected, a reduction of approximately fifteen per cent in the number of internships available will be necessary. The Council is confident that it will have the full support of the profession in removing from its approved list hospitals that fail to meet its requirements.

While the primary objective in insisting that hospitals meet the Council's standards is to improve the quality of internship training, the secondary effect of reducing the discrepancy between the number of interns and the number of internships should be welcomed by the profession and by the hospitals.

In the evaluation of residency training, the Council has enjoyed the collaboration and coöperation of the specialty boards. As a result of this cooperation, applicants for residencies in hospitals approved by the Council are able to plan their programs with the assurance that they will receive appropriate credit in qualifying for examination by one of the specialty boards. A significant cooperative understanding during the present year has been the reappraisal of surgical residencies that was carried out in collaboration with the American Board of Surgery. As a result of this reappraisal, training programs in general surgery are now classified in two categories: 1. Programs providing one or two years of training which will be recognized after July 1, 1950 as offering satisfactory experience in preparation for further training in the surgical specialties; and 2. Programs approved for three or four years of training which will be recognized after July 1, 1950 as providing adequate preparatory training for certification in general surgery. The establishment of two types of residencies in surgery of necessity created some temporary dislocations in the residency programs of hospitals previously approved. The concept of the graded residency, however, has been generally accepted and is one which should result in more thorough training for the resident who devotes three or four years of his professional career to training in the specialty.

CLASSIFICATION OF FOREIGN MEDICAL SCHOOLS

At the June 1949 meeting the Council requested and received authorization from the House of Delegates to establish a list of foreign medical schools that appear to provide educational programs comparable to those found in American medical schools. Since the June meeting, the Council has had under careful study the procedures to be followed in classifying foreign medical schools and has begun to compile information concerning these schools. This work is proceeding more slowly than had been hoped because of the difficulty in securing suitable personnel to assist in this task. It is hoped, however, that the Council will be in a position to establish a preliminary list of classified foreign medical schools by the early part or middle of 1950.

COOPERATIVE PLAN FOR THE APPOINTMENT OF INTERNS

For the past four years the Association of American Medical Colleges with the endorsement of the Council and the various hospital associations has been sponsoring a plan establishing a uniform date for the appointment of interns by hospitals. This plan, formerly knowns as "The Uniform Intern Placement Plan" has been renamed "The Cooperative Plan for the Appointment of Interns."

The plan which is in effect for appointments to internships beginning July 1, 1950 follows:

This plan for 1949 will apply only to undergraduate students in the fourth year of their medical school course.

APPLICATION FOR INTERNSHIP

1. Applications are to be filed with the hospitals beginning on the third Tuesday in October (Oct. 18, 1949).

2. Application should be made in duplicate; the original to be forwarded to the dean of the applicant's medical school for transmission together with credentials to the hospitals or hospital of the applicant's choice; the second copy to be mailed directly to the hospital or hospitals by the applicant.

3. The application may be accompanied by letters of recommendation from faculty members. Such letters of recommendation shall not be routinely requested by hospitals.

4. The number of applications filed shall not be limited in number.

TENDERING OF INTERNSHIP APPOINTMENTS

1. The tendering of internship appointments by hospitals shall be made by telegram. No telegram shall be sent which will arrive prior to 12:01 a. m. of the third Tuesday in November (Nov. 15, 1949). Telegrams may be filed in advance for delivery at 12:01 a. m.

Applicants may visit hospitals and be interviewed by the intern committee, but the hospital or its representative shall not commit the hospital or the applicant before November 15, 1949.

2. Hospitals may notify alternates of their status at the same time and in the same manner as their first choice candidates.

ACCEPTANCE OF APPOINTMENTS

1. Acceptance of appointments should be made promptly. Applicants should be allowed a reasonable period of time to consider appointment offers, but no specified waiting period after 12:01 a. m. is obligatory.

2. On acceptance of an appointment, prompt notification of withdrawal of applications to other hospitals which have offered appointments should be made.

The objective of this plan and its predecessors has been to eliminate the practice of offering hospital appointments to medical students early in their undergraduate course. This objective has the support of the majority of the medical schools and hospitals, although dissatisfaction with certain details of the plan has been expressed. At the time of preparing this report, it appears likely that a joint committee of the Council, the Association of American Medical Colleges, the American Hospital Association, the Catholic Hospital Association and the Protestant Hospital Association will be created in the near future, to restudy the whole problem of intern appointments and if possible to devise a new and improved plan for dealing with this problem that will be satisfactory to all groups and institutions concerned.

CONFERENCE COMMITTEE ON INTERNAL MEDICINE

During the past year the Conference Committee on Internal Medicine composed of representatives of the Council, the American College of Physicians and the American Board of Internal Medicine was reactivated. This committee, which had been created in 1939 to assist the Council in appraising residencies in medicine and the medical specialties, functioned effectively until the early years of the war when several members of the committee entered military service.

The Council is pleased that this committee will once again be active in evaluating medical residencies. This committee is made up of outstanding leaders in the field of internal medicine and should be an effective agent for promoting high standards of graduate training. In the spring of 1949 the American College of Physicians made a grant of $2,500 to the Council to assist it in its work in relation to this committee.

CONFERENCES WITH AMERICAN COLLEGE OF SURGEONS

In February 1948 a joint meeting of the Trustees of the American Medical Association and the Regents of the American College of Surgeons was held to consider the activities of both organizations in the field of hospital inspections and hospital accreditation. The consensus at this meeting was that desirable economies of effort, time and money could be accomplished if the American College of Surgeons and the Council on Medical Education and Hospitals could organize a single inspection service to evaluate residency training programs in surgery and the surgical specialties.

Since this meeting, members of the Council and the Council's staff have participated in a number of formal and informal meetings with representatives of the Regents and staff of the American College of Surgeons and with representatives of various American Boards in an attempt to work out a plan for a single or a coordinated inspection service. These discussions are continuing actively and it is hoped that within the not too distant future the Council, the College and the American Boards concerned can adopt standards for residency training in surgery and many of the surgical specialties that will be mutually acceptable and that a method can be developed whereby the Council and the American College of Surgeons can publish a single uniform list of institutions approved for residency or graduate training in such fields.

Medical education today encompasses such a broad field and such a multitude of activities that it appears evident to the Council that sound and intelligent progress will depend to a large extent on the ability of the various organizations and groups concerned with medical education to coordinate their

activities and resources to achieve a common objective. The Council has long enjoyed its collaboration with numerous groups and organizations and it is pleased that the preliminary discussions with the American College of Surgeons indicate the possibility of fruitful collaboration in still another field.

COLLABORATION WITH OTHER AGENCIES

The Council collaborates with numerous agencies and organizations in the field of medical education and hospital affairs. The close relations that the Council enjoys through regularly constituted liaison committees with the Association of American Medical Colleges and the Advisory Board for Medical Specialties have been particularly beneficial. The Council has continued its cooperation with the Army, the Navy, the Public Health Service and the Veterans Administration in the development of their programs for graduate medical training.

Conjoint activities with these and other organizations and agencies have been varied in nature and have involved members of the Council, the Secretary and members of the staff of the Council. These cooperative enterprises have included consultations, participation in conferences, meetings, the work of advisory committees and joint sessions. A partial list of the agencies and organizations not mentioned elsewhere in this report with which the Council has collaborated during the year includes:

American Hospital Association.
Catholic Hospital Association.
American Trudeau Society.
National Foundation for Infantile Paralysis.
National Security Resources Board.
American Society of Clinical Pathologists.
American Academy of Pediatrics.
Association of Canadian Medical Colleges.
Selective Service System.
American Orthopedic Association.
American Academy of Orthopedic Surgeons.
National Society for Medical Research.
Federation of State Medical Boards.
United States Office of Education.
State Department.
World Health Association.
Pan American Sanitary Bureau.
W. K. Kellogg Foundation.
Rockefeller Foundation.
Institute of International Education.
Institute of Inter-American Affairs.
American Nurses Association.
National Board of Medical Examiners.
American Physical Therapy Association.
American Registry of Physical Therapy Technicians.
American Occupational Therapy Association.
American Association of Medical Record Librarians.
College of American Pathologists.
American College of Radiology.
Academy of General Practice.
American Registry of X-ray Technicians.
Board of Registry of Medical Technologists.
State Medical Associations.
County Medical Societies.
State Licensing Boards.

ANNUAL CONGRESS ON MEDICAL EDUCATION AND LICENSURE

The forty-fifth Annual Congress on Medical Education and Licensure was held under the sponsorship of the Council on Medical Education and Hospitals and the Federation of State Medical Boards in Chicago in February 1949. More than 300 persons registered for the Congress. The program included papers discussing the establishment of new medical schools, the place of pediatrics and psychiatry in the medical curriculum, the World Medical Association in its relation to medical education, the educational programs of the Public Health Service, the economics of the hospitals' system and observations on medical conditions and medical education in Europe.

The forty-sixth Annual Congress on Medical Education and Licensure will be held in Chicago on February 5, 6 and 7, 1950.

HOSPITAL SERVICE IN THE UNITED STATES

In the past year the Council's annual census of hospitals showed a new high in the utilization of hospital service in the United States. The total of 16,422,772 admissions in 1948, an increase of 593,260 in comparison with the previous year, exceeded also the earlier record of 16,257,402 in 1945. While increases occurred in both the governmental and nongovernmental groups the expansion was not uniform throughout the hospital field. The federal hospitals, for example, reported a reduction of about 100,000 admissions; yet the governmental hospitals, as a group, showed a net increase of 86,147 and the nongovernmental hospitals 507,113. The greatest increase in service was in the general hospitals which reported 15,160,062 admissions or 92 per cent of all patients admitted in 1948. The psychiatric hospitals admitted 305,000, an increase of 13,046, while the tuberculosis hospitals had 105,588 admissions compared with 99,080 in 1947.

The volume of hospital service is also reflected in the average daily consus of 1,217,154 reported in 1948. Included in this total is an average census of 437,590 in the general hospital group, a figure representing 36 per cent of the daily patient load in all registered hospitals. The psychiatric hospitals, with only 2 per cent of the admissions, reported an average daily census of 664,399 indicating that nearly 55 per cent of the occupied hospital beds are continuously utilized for psychiatric care. In the field of tuberculosis, the daily census of 66,484 represents approximately 5 per cent of the total hospital load.

It should be noted that the number of admissions reported in the present survey do not include hospital births, which last year totaled 2,794,281 compared with the all-time record of 2,837,139 in 1947. Again the general hospitals reported the greatest number, 2,715,645, or 97 per cent of all hospital births.

The number of hospitals registered by the American Medical Association in 1948 was 6,335, including 4,589 classified as general hospital services. The total capacity is 1,423,520 beds with approximately 72 per cent in the governmental hospitals and 28 per cent in the nongovernmental group. The general hospitals have 576,459 beds, the psychiatric hospitals 691,499 and the tuberculosis division 81,993. Last year the over-all hospital occupancy rate was 85.5 per cent, the general hospitals reporting 75.9 per cent and the psychiatric hospitals 96.1. The high percentage of beds occupied in psychiatric hospitals is an indication of the urgent need for additional beds in this field as many of the hospitals are now required to operate well beyond their normal rated capacity.

CHANGE IN STATUS OF MEDICAL SCHOOLS

On November 9, 1948, the Council voted to admit the Chicago Medical School to its list of approved medical schools. By this action all students in regular attendance at the school on that date will, on graduation, be considered by the Council to be graduates of an approved medical school.

On June 4, 1949, the probationary status of the Hahnemann Medical College and Hospital was terminated and the Council voted to restore the school to a status of full approval.

APPROVAL OF SPECIALTY BOARDS

Examining and certifying boards in nineteen specialties have been approved by the Council. Three specialty boards were added to the group in 1949, when the American Board of Preventive Medicine and Public Health, the American Board of Proctology and the Board of Thoracic Surgery were approved. The Board of Thoracic Surgery has been approved as a subsidiary board of the American Board of Surgery.

MEDICAL SCHOOLS VISITED

During the year, October 1, 1948 to September 30, 1949, the following medical schools were visited for consultation, survey or other purposes:

University of Arkansas School of Medicine.
Georgetown University School of Medicine.
Chicago Medical School.
University of Kansas School of Medicine.
University of Nebraska College of Medicine.
Hahnemann Medical College and Hospital of Philadelphia.
University of South Dakota School of Medical Sciences.
University of Ottawa Faculty of Medicine.
Laval University Faculty of Medicine.
Syracuse University College of Medicine.

V 1
194

INSPECTION OF HOSPITALS AND TECHNICAL SCHOOLS

Inspections of hospitals and technical schools made by the Council during the year October 1, 1948 to September 30, 1949 are summarized as follows:

Intern Training	109
Permanent Staff	80
Regional Representatives	29
Residencies and Fellowships	368
Permanent Staff	261
Regional Representatives	107
Intern Training and Residencies	334
Permanent Staff	232
Regional Representatives	102
Registration	14
Technical Schools	12
Total	837
Individual Residencies and Fellowships Investigated	1,996
Permanet Staff	1,505
Regional Representatives	491

SUMMARY OF HOSPITAL AND TECHNICAL SCHOOLS

Figures for approved hospitals and technical schools with changes occurring during the year, October 1, 1948 to September 30, 1949, are as follows:

Registration of Hospitals	
Hospitals registered, Oct. 1, 1948	6,302
New institutions registered to Sept. 30, 1949	244
Closed or transferred to unclassified file	100
Hospitals registered, Sept. 30, 1949	6,446
Internship Approval	
Hospitals approved for intern training, October 1, 1948	834
Approved during year	16
Removed from approved list	54
Hospitals approved for intern training, September 30, 1949	796
Residency Approval	
Hospitals approved for residency training, October 1, 1948	1,311
Approved during year	51
Removed from approved list	10
Hospitals approved for residency training, September 30, 1949	1,352
Medical Technology Schools	
Approved schools, October 1, 1948	336
Approved during year	69
Removed from approved list	1
Approved schools, September 30, 1949	404
Medical Record Librarian Schools	
Approved schools, October 1, 1948	12
Approved during year	4
Removed from approved list	1
Approved schools, September 30, 1949	15
Occupational Therapy Schools	
Approved schools, October 1, 1948	25
Approved during year	0
Removed from approved list	0
Approved schools, September 30, 1949	25
Physical Therapy Schools	
Approved schools, October 1, 1948	25
Approved during year	6
Removed from approved list	0
Approved schools, September 30, 1949	31
X-Ray Schools	
Approved schools, October 1, 1948	212
Approved during year	24
Removed from approved list	2
Approved schools, September 30, 1949	234

COUNCIL PUBLICATIONS

During 1949 the Council was responsible for preparing material for four numbers of THE JOURNAL:

Hospital Number	May 7
Internship and Residency Number	May 14
State Board Number	May 21
Educational Number	September 3

Other regular publications of the Council during the year included:

Postgraduate and Continuation Courses for Physicians—published in THE JOURNAL semi-annually.
Proceedings of the 1949 Annual Congress on Medical Education and Licensure.
Approved Examining Boards in Medical Specialties. (A summary of the requirements for certification established by the American Boards.)
Choice of a Medical School. (Prepared for the guidance of prospective medical students.)
Approved Colleges of Arts and Sciences.
Federation Bulletin. (A monthly bulletin published for the Federation of State Medical Boards of the United States.)
Schools for Medical Technologists.
Schools for Physical Therapy Technicians.
Schools for Occupational Therapy.
Schools for Medical Record Librarians.
Schools for X-ray Technicians.

The Council also has reprinted for distribution a number of articles dealing with questions relating to the Council's work and responsibilities. In addition, the Council has published numerous statements in THE JOURNAL from time to time concerning current problems.

Revision of publications of the Council during the year included:

Essentials of an Approved Internship.
Essentials of Approved Residencies and Fellowships.
Essentials of Approved Examining Boards in Specialties.
Reciprocity and Endorsement Policies of Medical Licensing Boards.
Requirements of Candidates for Medical Licensure on the Basis of Credentials Obtained in Countries Other Than the United States and Canada.

ELECTION OF DR. GUY A. CALDWELL TO THE COUNCIL

Dr. Guy A. Caldwell of New Orleans was elected by the House of Delegates to succeed Dr. Reginald Fitz, who completed twenty-one years of distinguished service as a member of the Council in June 1949.

PROFESSIONAL STAFF CHANGE

Dr. Robert C. Parkin resigned from the Professional Staff of the Council to accept an appointment as Assistant Professor of Clinical Medicine and Coordinator of Graduate Medical Education at the University of Wisconsin Medical School.

TRIBUTE TO DR. RAY LYMAN WILBUR

The Council was greatly saddened by the death on June 26, 1949 of Dr. Ray Lyman Wilbur. Dr. Wilbur became a member of the Council in 1920 and after the retirement of Dr. Arthur Dean Bevan served as Chairman of the Council from 1929 to 1946, when he retired from the Council. Under Dr. Wilbur's distinguished leadership, the Council was greatly strengthened in its efforts to advance the quality of medical education in the United States. After his retirement from the Council, Dr. Wilbur maintained an active interest in its affairs. He frequently attended Council meetings and his advice and assistance were repeatedly sought by the members of the Council and its staff. Thus almost up to the day of his death Dr. Wilbur was active in promoting the establishment of the national organization for the voluntary support of medical schools referred to earlier in this report. With the death of Dr. Wilbur, the Council and medical education have lost a great leader.

APPRECIATION

During the past year as for many years, the Council on Medical Education and Hospitals has enjoyed the full and cordial cooperation of many institutions and organizations. The Council wishes at this time to record its sincere gratitude for the assistance so received. It is a particular pleasure for the Council to express its appreciation of the splendid support and encouragement that it has received from the officers, Trustees and members of the House of Delegates of the American Medical Association.

Respectfully submitted,

H. G. WEISKOTTEN, Chairman.
RUSSELL L. HADEN.
WILLIAM S. MIDDLETON.
VICTOR JOHNSON.
W. L. PRESSLY.
HARVEY B. STONE.
GUY A. CALDWELL.
DONALD G. ANDERSON, Secretary.

REPORT OF THE COUNCIL ON SCIENTIFIC ASSEMBLY

To the Members of the House of Delegates of the American Medical Association:

Since the Interim Session in St. Louis, Nov. 30 to Dec. 3, 1948, the Council on Scientific Assembly has held meetings on Feb. 12, April 7, May 9, July 25 and Sept. 22, 1949, either in Chicago or Washington. The action taken at these meetings is summarized in this report. A report on further action taken at meetings planned for October 20 and November 18 will be presented as a supplementary report.

SCIENTIFIC PROGRAM FOR WASHINGTON CLINICAL SESSION

The Council offers the scientific program for the Washington Clinical Session as a part of its report. The program, based on eighteen clinical topics given in six or three units, each covering a half day, attempts to cover the most timely subjects of rapidly advancing clinical medicine. To arrange such a program is no inconsiderable task. Eighteen coordinators, chosen by the Council, work as advisors to eighteen subchairmen, who in turn arrange for the detailed program with the aid of associates chosen by themselves.

In one topic alone, for example, this involves the coordinated effort of twelve persons on a committee, fourteen speakers in addition to members of the committee who take part in the program, an energetic chairman of the Local Committee with a large number of associates, the headquarters staff in Chicago, the associated Committee on Scientific Exhibit and, in general charge, the Council on Scientific Assembly. When this is multiplied by eighteen, to cover all topics, the program of the Clinical Session becomes a complex affair, made possible only by many willing hands—in this Session, particularly those of the members of The Medical Society of the District of Columbia and the general chairman, Dr. Oscar B. Hunter. The Council would like to express its appreciation at this time to all the loyal Fellows of the American Medical Association who make a Session of this type possible.

The problems associated with the development of the Interim Sessions, now designated as Clinical Sessions, have occupied a large portion of the Council's time in the last year. Based on the experience gained from the Scientific Assembly of the first Interim Session, held at Cleveland on Jan. 5 and 6, 1948, and the second, held at St. Louis, Nov. 30 to Dec. 3, 1948, the Council decided to omit the general lectures at the Washington Session and to concentrate its efforts on the building up of the clinical presentations, integrating them as far as possible with the scientific exhibits. Although the arrangements for the meeting in Washington do not conform to all the standards set up by the Council, it is hoped that, in view of the problems continually arising regarding accessibility and size of rooms, lighting, loud speakers, television, motion pictures, over-crowding, tickets for individual presentations and many others, the Session will find approval in the House of Delegates. In general, the Council has conformed to the pattern evolved in part from the opinions of physicians who replied to a questionnaire sent out to a random list following the St. Louis Interim Session. A favorable report was received from the majority with almost unanimous approval of the clinical presentations and the Scientific Exhibit. Some were not in favor of general lectures, television or motion pictures. With these suggestions at hand, the Council has molded the program of the Washington Session to fit, as far as possible, into the type of presentation most favored by the majority of Fellows.

ENLARGEMENT OF THE COUNCIL

The Council has found its work facilitated by the enlargement of its membership from five to seven, by action of the House of Delegates at the Atlantic City Session in 1949.

TELEVISION

Since the advent of television, questions have arisen regarding the proper place of this new development in the Scientific Assembly. At present sponsored by commercial interests, although scientific in content as it combines some features of a scientific exhibit and others of a clinical presentation, television did not fall completely into any one of the divisions of Technical Exhibits, Scientific Exhibits or the Scientific Assembly. It was finally decided that the television program at the Annual and Clinical Sessions should be the responsibility of the Council on Scientific Assembly, considering it as primarily a part of the scientific program. The Council, therefore, appointed one of its members, Dr. Stanley P. Reimann, as the official representative of the Council for the 1949 Annual Session and the 1949 Clinical Session. Problems connected with the presentation of television programs are not as yet entirely solved, but the Council, working on rules and regulations for the handling of scientific television by commercial firms, expects to formulate shortly a plan that will be mutually advantageous to both the commercial interests and the American Medical Association. It has already adopted a rule that "before any commercial house makes any arrangements in a particular city where a session is to be held, it shall communicate with the Council on Scientific Assembly which will appoint a local committee to attend to the affair."

SECTION ON PHYSICAL MEDICINE AND REHABILITATION

The new Section on Physical Medicine and Rehabilitation, having been established by action of the House of Delegates at the 1949 Annual Session, will hold its first meeting at the 1950 Annual Session. The following officers for the new Section have been appointed by the Council: Dr. Frank H. Krusen, Rochester, Minn., Chairman; Dr. George M. Piersol, Philadelphia, Vice Chairman, and Dr. Howard A. Rusk, New York, Secretary.

THE GEORGE R. MINOT LECTURE

The Council approved the request of the Section on Experimental Medicine and Therapeutics to establish the George R. Minot lecture to be given each year during the Section meeting.

REQUEST FOR SECTION ON MILITARY MEDICINE AND SURGERY

The request that a Section on Military Medicine and Surgery be established, which was referred to the Council by the House of Delegates at the Atlantic City Session, is being given consideration, and a hearing has been arranged. No definite action has yet been taken by the Council.

MISCELLANEOUS BUSINESS

At the suggestion of the Council a change was made in the format of the Official Program for the 1949 Annual Session in Atlantic City, with the aim to increase readability and facilitate handling.

The Council approved of an invitation being extended to Negro physicians to attend the scientific program at the 1949 Clinical Session in Washington and requested that this invitation be specifically extended to the faculty members of Howard University and to the members of the Medical and Chirurgical Society, Inc., of Washington.

Respectfully submitted,

HENRY R. VIETS, Chairman.
LEONARD W. LARSON.
STANLEY P. REIMANN.
ALPHONSE McMAHON.
CHARLES H. PHIFER.
CARL A. LINCKE.
MICHAEL E. DEBAKEY.
ELMER L. HENDERSON, President-Elect
MORRIS FISHBEIN, Editor, The Journal
GEORGE F. LULL, Secretary
ERNEST B. HOWARD, Assistant Secretary
} Ex officio

REPORT OF THE COUNCIL ON MEDICAL SERVICE

To the Members of the House of Delegates of the American Medical Association:

REORGANIZATION OF COUNCIL

Progress is being made on the reorganization plan approved by the House of Delegates in December 1948. Under this plan, adopted in the interest of efficiency and economy, activities that relate to medical care are coordinated within the Council on Medical Service.

For the purpose of reorganization, medical care activities were divided into seven categories and a correlating committee created for each. The Council is selecting the members of the committees so as to represent the various areas of the country and to obtain persons with experience in the matters to be studied. The membership will not be constant. Each member will serve for two years and new members will be added as conditions warrant. The Chairman of the Council will call the first meeting of each committee and at this meeting each committee will select its own chairman. One or more members of the Council is to serve on each committee. The present set-up of the correlating committees and their membership is as follows:

1. Correlating Committee on Extension of Hospitals and Other Facilities (The Board of Trustees has integrated its Committee on Hospitals and the Practice of Medicine with the Council's Correlating Committee on Extension of Hospitals and Other Facilities. For the most part the members of the former Committee make up the membership of the latter Committee.)

Elmer Hess, Erie, Pa.
Walter E. Vest, Huntington, W. Va.
John W. Cline, San Francisco.
Walter G. Phippen, Salem, Mass.
(one or more to be added.)

2. Correlating Committee on Medical Care of Industrial Workers (This Committee was selected after conference with the Council on Industrial Health and will work closely with that Council.)

Thomas A. McGoldrick, Brooklyn.
Warren F. Draper, Washington, D. C.
Harold A. Vonachen, Peoria, Ill.
William A. Sawyer, Rochester, N. Y.
Frederick Slobe, Chicago.
Leo Price, New York.

3. Correlating Committee on Indigent Care

H. B. Mulholland, Charlottesville, Va.
Joseph H. Howard, Bridgeport, Conn.
Dean W. Roberts, Baltimore.
Roscoe C. Webb, Minneapolis.
E. A. Ockuly, Toledo, Ohio.
Everett P. Coleman, Canton, Ill.
Everett C. Fox, Dallas, Texas.
A. J. Bowles, Seattle.

4. Correlating Committee on Medical Care of Veterans (The Board of Trustees has integrated its Committee on Veterans' Affairs with the Council's Correlating Committee on Medical Care of Veterans.)

James R. McVay, Kansas City.
Charles B. Puestow, Chicago.
Alphonse McMahon, St. Louis.
Jack Supermaw, Madison, Wis.
Louis M. Orr, Orlando, Fla.
(one or more to be added.)

5. Correlating Committee on Prepayment Hospital and Medical Service (Selection of this Committee is in process and will be announced in the Council's Supplementary Report.)

6. Correlating Committee on Relations with Lay-Sponsored Voluntary Health Plans

(Selection of this Committee is in process and will be announced in the Council's Supplemental Report.)

7. Correlating Committee on Maternal and Child Care

(Selection of this Committee will be made after conferences with the Bureau of Health Education and other interested groups.)

CONFERENCE ON MEDICAL SERVICE

At the Annual Session of the House of Delegates in June 1949, the House of Delegates adopted the report of the Reference Committee on Insurance Plans and Medical Service approving the following resolution:

"Resolved, That the American Medical Association initiate, through its Council on Medical Service, a conference of representatives of various groups, medical and lay, for the purpose of considering formation of a joint planning committee for the study and preparation of more comprehensive plans of medical care for the nation."

The Conference, as suggested in the Resolution approved by the House of Delegates, will be sponsored by the Council on Medical Service through its Correlating Committees.

COOPERATION WITH THE NATIONAL EDUCATION CAMPAIGN

Since its organization in 1943, the Council has maintained a supply of literature on health insurance—voluntary and compulsory. In 1946, the Council cooperated with the National University Extension Association in supplying material to some 7,500 schools, where debates were scheduled on the subject of voluntary vs. compulsory health insurance. This experience resulted in more and more requests for material, and the Council geared its supply to about 20,000 pieces of material a year.

The first announcements of the National Education Campaign altered the picture entirely and brought forth a deluge of requests. Realizing that Whitaker and Baxter could not achieve pamphlet production for several months, the Council accepted this situation and prepared several types of kits for physicians, debate students, interested laymen, lay speakers, libraries, medical society committees and others.

During the first nine months of 1949, almost 1,000 requests a month were received from medical societies and prepayment plans, individual physicians, hospitals and laymen. In response to these requests the Council has supplied over 150,000 individual pieces of literature on the subject of health insurance. Most of the literature is distributed only by request, with much of it in the form of kits that average ten separate items each. To assure maximum use of material, it is generally requested that the kit be placed in a school or a local library when the recipient has finished with it.

Another method developed to assure maximum use of the material is an "Availability List." This list contains the titles of some twenty-eight pamphlets and reprints which can be obtained from the Council office as well as material available through the Bureau of Medical Economic Research and the Whitaker-Baxter office. Instead of sending a supply of literature to be distributed at large medical society meetings, a supply of the "Availability List" is provided so that material may be selected to suit local needs. The results have been rather surprising, from one meeting alone over 500 requests were received. As a special aid to physicians giving talks, the staff prepared a set of information cards. These cards contain pertinent data on all phases of the general health insurance subject and save the physician many hours of reading. The demand for these cards has continually exceeded the supply.

To meet the immediate demand for material, the Council published several pamphlets on the British program. "100 Questions and Answers on the British National Health Act" contains 100 questions developed by the Council staff and answered by Miss Elizabeth W. Wilson. "Medicine Under the British National Health Act" contains Dr. Fishbein's address, given before the Annual Congress on Medical Education and Licensure in Chicago in February 1949. "Britain's National Health Service" is a series of articles by Miss Wilson and THE JOURNAL'S London correspondent.

Throughout this period the Council has attempted to supply only the small quantity demands, leaving large quantity requests to the Public Relations Department and to the National Education Campaign headquarters.

The Council will continue to supplement the campaign literature by supplying more detailed and varied material for libraries, students preparing debates or papers, writers, medical

societies and others interested in more information and viewpoints than are contained in single pamphlets. Particular attention has been and will continue to be paid to public and school libraries.

COMPULSORY CASH SICKNESS BENEFITS LEGISLATION

Bills to provide cash payments during periods of non-occupational disability were introduced in sixteen state legislatures and Hawaii and Alaska during 1949. The states are: Colorado, Connecticut, Delaware, Florida, Illinois, Maryland, Massachusetts, Minnesota, Montana, Nevada, New Mexico, New York, Pennsylvania, Tennessee, Washington and Wisconsin.

This is about the same number of states as received such proposals in 1947, although seven (Colorado, Connecticut, Delaware, Florida, New Mexico, Tennessee and Wisconsin) are new on the list and four (Alabama, Arizona, New Hampshire and New Jersey) do not appear on the list in 1949.

Contrary to the expectations of many people, only two states —Washington and New York—passed bills. Washington is in the midst of a controversy over its bill, and whether or not it will be put in operation depends on the outcome of a referendum to be held during the general election in November 1950. In New York the law calls for the tax to commence Jan. 1, 1950, but no benefits to workers will accrue prior to July 1, 1950.

Of the four compulsory state cash sickness benefits laws now enacted, the New York law seems to be the most acceptable. In Rhode Island the state has a monopoly; in California and New Jersey the state competes with the voluntary plans but requires that the voluntary plans offer more than the state plans in the way of benefits; in New York the state insurance fund competes on equal terms with the voluntary plans. To those, then, who believe in private enterprise as opposed to government monopoly, the New York program should lend heart. It follows the Workmen's Compensation approach and should give private insurance carriers an opportunity to show their wares, and, since in the insurance field New York is often a strong influence on other states, it may result in a tendency toward this type of legislation rather than the monopoly type as in Rhode Island.

Developments in California, Rhode Island and New Jersey seem to lend credence to the oft repeated statement that it is not the original legislation that one needs worry about, but rather the subsequent amendments and changes. For example, more than fifty bills to amend the disability benefits program were introduced this year in the California legislature. Most of the bills were to liberalize the program; i. e., reduce the seven-day waiting period and increase the maximum benefit period to thirty-nine weeks. One liberalization enacted was an arbitrary $8.00 per diem hospital allowance regardless of whether a beneficiary was required to pay for such accommodations. Rhode Island also had its share of bills. Nine were introduced, and one of those which passed increased the maximum benefit from $18 to $25 a week and increased the period of payment from twenty to twenty-six weeks. Even in New Jersey, despite the fact that the program had just begun operation, the legislature received eight bills to liberalize benefits, alter administrative procedures and so on.

These are examples of the machinations of those groups that ease our fears with compromise legislation and then proceed to exert all sorts of political pressure and play on political expediencies to get what they wanted in the first place. This is the danger in compromise. This danger is pointed out very clearly by Miss Elizabeth Wilson in her study of "The Rhode Island Cash Sickness Compensation Program" with the words, "The main trouble with the Rhode Island State System is that it is a state system, that is, political . . . . The political angle comes in through the amending legislation."

While potential dangers lie in possible amending legislation, the principal immediate concern of the medical profession is the doctor's certificate. It is this certificate that, in large part, determines who will or who will not be paid. The fact that "blame" for rising utilization, or absenteeism, is likely to be laid to the medical profession and that "malingering" is often the result of disability benefit program should give the profession cause for serious consideration of such compulsory legislation. Moreover, it might be a relatively simple matter to add a new section calling for medical service after a disability benefit plan has actually become law. Such an amendment could be enacted much more easily than separate compulsory medical service legislation. This in itself may be reason enough to oppose the principle of compulsory cash sickness benefits legislation, at the state level as well as at the national level.

The Council on Medical Service has followed developments in cash sickness benefits legislation and, as in this report, has brought these developments to the attention of the House of Delegates. The study of the Rhode Island program, made by Miss Elizabeth W. Wilson, was released by the Council this spring, and a limited number of copies were reproduced and mailed to a select group, including the state medical associations, for comment. The study received much favorable comment in the press and trade journals and is a valuable addition to the literature in this field. However, the Council is not yet prepared to make a full report on the implications of this type of legislation so far as the medical profession is concerned.

In view of this, the Council on Medical Service plans to call a meeting of its Correlating Committee on Medical Care of the Industrial Worker to consider the advisability of clarifying the American Medical Association stand concerning the principle of compulsory cash sickness benefits. To this meeting will be invited representatives of the state medical societies of Rhode Island, California, New Jersey and New York, as well as representatives of insurance companies operating under nonmonopolistic laws, so that first hand information may be obtained on the operation of such programs in these states.

HEALTH COUNCILS

One of the most encouraging movements in the health field is the increasing interest in health councils. Through this movement, physicians and the lay groups that make up a community are working together to solve health problems at the local level. Here, for the first time in two decades, the emphasis is placed on the community rather than the nation—on community cooperation instead of federal handouts. In this movement the medical profession is recognizing and accepting its responsibility for providing leadership in health planning.

Until a year or two ago health councils were generally thought of as an arm or division of the local community chest organization, with the medical profession an invited advisor. The principal interest in many of these councils was to raise money or promote the program for some special group. The present trend is toward a community organization with the medical profession in the role of sponsor or at least as a major participant.

To provide some direction to the efforts of medical societies in this activity, the Council on Medical Service and the Committee on Rural Health prepared and published a pamphlet, entitled "The Community Health Council." The pamphlet defines a community health council as a community-wide committee which brings into one agency all local elements able and willing to contribute to better health planning. In line with this definition, the pamphlet contains suggestions as to organization, functions and projects. Some 10,000 copies were printed and distributed.

Among the groups particularly interested in the development of health councils are the United States Chamber of Commerce, the American Legion and the National Health Council. The Council on Medical Service is cooperating with the Chamber of Commerce and the Legion in stimulating its local units to participate in health council activities. As for the National Health Council, it is conducting a nationwide survey of the health council movement. The Council on Medical Service is assisting in gathering data for the study and expects to participate in the evaluation of such information as it is collected. When completed, the study should provide a wealth of information on all phases of health council development.

If the health council movement succeeds in refocusing attention on the need for and value of community cooperation, it will be well worth the effort. At no time has there been more need for reawakening of local pride and of concrete demonstrations of the fact that the solutions to our health problems lie in each community and not in Washington. It is in keeping with the objectives of medical societies to assume responsibility

V 1
194

in the leadership and direction of health council organization and activity. Only by leading can the medical profession escape being led.

The Council on Medical Service urges every county and district medical society to participate actively in existing health councils in their communities and cooperate with interested lay groups in the establishment of such councils where they do not now exist.

PHYSICIANS PLACEMENT SERVICE

The Bureau of Information of the American Medical Association was created in 1944 to aid in the location of physicians on their return from military service. In November 1947, following the return of most of the physicians who had been in military service, the Bureau was abolished and its functions transferred to the Council on Medical Service. This is the Council's first report on this activity and is in considerable detail so that the members of the House of Delegates may know how the Physicians' Placement Service operates.

For the convenience of physicians desiring a location or change of location, the Council maintains three types of listings of areas where the services of a physician are needed. First, there are areas requesting general practitioners. These are the most numerous, and, therefore, individual listings are maintained on each state. Requests are received from state and county medical associations, and from citizens' groups such as community clubs, Lions clubs, Chambers of Commerce, parent-teachers associations and individual laymen. Second, listings are maintained for areas or communities desiring specialists, but since these are not as numerous, the openings in each specialty for the United States as a whole are combined. These requests are usually received from physicians' groups or communities in need of a particular type of service. Third, information is also available on physicians who desire an assistant or associate, large industrial organizations that need full time physicians, county health departments desirous of employing full time health officers, institutional openings and various government positions.

The assistance of the state medical associations is invaluable in keeping up-to-date information on the openings. Approximately every six months the listings on file are sent to the state medical associations with a request that any locations or positions which have been filled be removed from the list and any new openings be added. Follow-up cards are sent at frequent intervals to the areas requesting the services of a physician to ascertain the current status of their need. When a physician inquires about a desirable location, any one or all three types of listings are mailed to him, depending on the nature of the request. A roster of the state medical association secretaries is included in order that the physician may write directly to the state in which he is interested and receive detailed information about specific locations.

The Council also has Summary Sheets for every county in the United States. The information on these sheets was originally obtained from the state medical associations, the Council on Medical Education and Hospital of the American Medical Association, the Bureau of the Census, Sales Management and the American Telephone and Telegraph Company. These sheets give the names of the county and state medical society secretaries and a brief résumé of the population, number and type of hospitals, total number of physicians, location and climate, principal cities, retail sales and the medical society sponsored prepayment plans available in that particular county.

During 1948 approximately 600 requests were received from doctors interested in locations, and during the first seven months of 1949 over 250 letters have been received from physicians, most of whom are just starting in the practice of medicine or returning from military service. During this same period some 200 requests were received from individuals or groups desirous of obtaining the services of physicians for their town or area. In addition to the written requests for locations, many physicians visited the office to secure information. It has been of particular interest to the Council to note that in recent months several physicians have commented on the fact that good locations are not readily available. This might be an indication that the dearth of physicians is not as great as it has been in previous years.

Reviewing the Placement Service activities for the past year we find that most of the physicians seeking a location are entering practice for the first time, either directly from an internship or from specialty training. Contrary to what might be expected, most of the men sought a location for general practice rather than for a specialty. This may be because it is easier for a specialist to find a spot for himself while a general practitioner must rely on others for possible locations. Cities of 25,000 to 50,000 population are most popular. The most popular areas are the West Coast, the Southwest, and the Middle West. Young physicians seeking specialty placements seem to prefer surgery and internal medicine.

As to the areas needing physicians from which requests come, most of the requests are from the Middle West, rarely from the South or those states supposedly lacking in numbers of physicians. Requests come mostly from laymen (community clubs, leaders), and usually a general practitioner is desired.

THE EMERGENCY CALL PROBLEM

A most difficult and yet ever present problem for the county medical society is the handling of emergency medical care calls. The National Education Campaign makes the solution to this problem doubly important, since an unfortunate circumstance in connection with one real emergency case can undo the good done by a dozen speakers or a thousand pamphlets.

During the summer of 1948 the Council surveyed the situation and found only about sixty county societies with plans for handling these calls. To stimulate interest "Emergency Calls" was made a subject for discussion at two of the "Grass Roots Conferences." Then, as a follow up to assist the medical societies in developing plans, the Council published a pamphlet entitled "Planning for Emergency Medical Calls" and distributed it to each of some 2,100 county societies. This pamphlet presents sixteen plans now in operation as examples of how emergency calls can be handled. To date over 5,000 additional copies have been requested by county society committees. At present the Council is preparing a second pamphlet, designed specifically to assist the small county medical societies.

That interest in this problem has been aroused in many states is shown by a recent survey carried on by the Council through the state medical associations. Although at the time of the writing of this report, only twenty-nine states had replied, eighteen reported a total of 225 emergency call plans in operation. The states are: Alabama, Arizona, Colorado, Indiana, Maryland, Massachusetts, Michigan, Minnesota, Missouri, New Jersey, Pennsylvania, Rhode Island, Tennessee, Texas, Utah, Washington, West Virginia and Wisconsin. Special mention should be made of Indiana, which reported all county societies as having a plan; Michigan, reporting forty-one county society plans; Pennsylvania, with nineteen plans; Wisconsin, with sixteen plans; and Maryland and New Jersey each with eleven county society emergency call service plans. A complete report for publication in THE JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION is planned when the survey is completed.

VOLUNTARY HEALTH INSURANCE

In the June report to the House of Delegates, the Council on Medical Service estimated that 55,000,000 Americans were insured for hospitalization benefits and that 30,000,000 Americans were covered for surgical expense benefits. The final survey figures for the year ended Dec. 31, 1948 proved those estimates to be most conservative.

Dec. 31, 1948 Survey Report.—Hospital and Surgical.—The total figures for the end of 1948 according to a report recently published by the Survey Committee of the Health Insurance Council indicate enrolment estimates of 61,000,000 persons and 34,000,000 persons protected by hospitalization and surgical insurance respectively. In arriving at these figures the Survey Committee included all types of recognized voluntary health insurance programs.

June 30, 1949 Estimate.—By adjusting the midyear 1949 accident and health insurance premium increase and adding the reported enrolment figures from Blue Cross type and Associated Medical Care Plans, it seems reasonable to assume that on June 30, 1949 approximately 65,000,000 Americans were pro-

tected by hospitalization insurance and approximately 38,000,000 Americans were insured for surgical benefits.

Growth During 1948.—The remarkable enrolment increase during 1948 indicated a net growth of nearly 8,500,000 in hospitalization insurance and a net increase of over 7,750,000 under surgical benefit insurance. Insurance companies, hospital insurance companies, fraternal societies, Blue Cross plans and medical society, including Blue Shield, prepayment plans account for practically all the growth.

The local Blue Cross plans and the medical society plans were responsible for approximately 3,250,000 of the total increase in those insured for hospitalization benefits while general insurance companies, special hospital insurance companies and fraternal societies were responsible for the balance of the increase. The medical society prepayment plans and plans coordinated with Blue Cross may be credited for approximately 3,500,000 of the total growth of surgical insurance benefit enrolment increase while other voluntary agencies have developed the balance.

It is encouraging to note that two medical society sponsored plans, Michigan Medical Service and United Medical Service of New York, each have enrolled more than a million persons. Other plans are beyond or near the half-million mark. A complete report on enrolment as well as plan benefits will be included in the revision of the Council's brochure, "Voluntary Prepayment Medical Care Plans."

Correlation of Sales and Underwriting.—At the end of 1948, the local Blue Cross plans protected in the aggregate over 31,000,000 Americans. This represents more than 51 per cent of the total insured against the costs of hospitalization. The insurance companies reported approximately 26,000,000, 42.6 per cent of the total, while other organizations accounted for the balance.

The insurance companies and fraternal societies accounted for the largest numbers insured for surgical expense benefits. These agencies insured more than 19,500,000, or over 57 per cent of the total. Prepayment plans coordinated with Blue Cross plans, medical society-sponsored, including Blue Shield type, reported aggregate coverage in excess of 10,500,000 subscribers. This represented a little more than 31 per cent of the total insured for surgical expense benefits. Other organizations, including industrial, mining, lay-sponsored, private group clinics and university health plans, protected nearly 4,000,000, or approximately 11 per cent of the total.

In total numbers 55.8 per cent as many persons are insured for surgical expense benefits as are protected by hospitalization insurance. Local Blue Cross plans and medical society prepayment plans sell surgical expense coverage to 33.9 per cent as many persons as they sell hospitalization benefits. Insurance companies and fraternal societies sell surgical benefits to 75.5 per cent as many persons as they insure for hospital benefits.

In contrast to the two main groups, other organizations, industrial, mining, lay-sponsored, private group clinics and university health plans, insured more persons for surgical benefits than they did for hospital expense benefits.

It should be remembered that the figures for hospitalization insurance benefits and surgical expense benefits are representative of the number of persons insured under each category and the totals should not be added. It is true that one person may be insured by more than one type of insurance program for the same general insurable hazard, however, those responsible for this comprehensive survey did evolve a formula to avoid counting the same insured person under more than one category.

Medical Expense Benefits.—Prepayment programs designed to assist in defraying the expenses of medical care are more recent than those covering hospitalization and surgical expenses. Medical expense benefits are those which cover medical expenses other than surgery. They range from in-hospital medical (non-surgical) expenses all the way to the more comprehensive benefits providing either payments or services for home and office visits and other routine health care.

The total number as of Dec. 31, 1948 who were insured against these additional costs has been estimated as approximately 13,000,000. This is nearly 4,000,000 more than the number protected at the end of 1947. It is estimated that the number had increased to between 14,000,000 and 15,000,000 by June 30, 1949.

Several agencies are continuing to experiment in this field. In order to prepay all costs of health on an individual basis it is necessary to charge a premium which includes the cost of all care plus the cost of administration. Obviously this all inclusive type of program, whether operated by governmental or private agencies, would cost the individual user of health care more than it would cost without a prepayment arrangement. It is indicated that a good many of the medical expenses in addition to surgical expenses may be covered more soundly by a group underwriting.

Some agencies require disability as a prerequisite to some of these benefits. Others provide safeguards by means of waiting periods or deductible clauses. This means that the patient pays for the first few home or office calls for any specified condition, or that the patient initially pays a specified dollar amount toward the total cost of care for each specified ailment. These methods are being tested as a means of reducing the administrative details and at the same time keep premiums at an attractive level.

The Council on Medical Service has been active in these comprehensive studies. It is planned that these studies will be continued and the reports revised each year. Each survey develops new health insurance facilities not known the previous year. This is due to the local nature of some of the plans. Many plans have been discovered which were purely local in origin and operation. They were designed to meet specific needs peculiar to the locality and did not attract attention elsewhere until these comprehensive studies were undertaken. It is probable that more persons enjoy the benefits of voluntary health insurance than the aforementioned figures indicate. As these surveys continue, eventually all the voluntary health insurance figures will be included.

Future Development and Problems.—Much of the past growth has come from large groups in industrial and urban areas. Many are employed by large concerns and enrolment has been facilitated by payroll deduction and employer contribution. Another large segment comes from memberships in clubs and associations. Many of these groups are enrolled and the insurance payments are included along with membership dues. These fields have been well provided for, in most instances, by present efforts and facilities.

Those who do not enjoy the availability of voluntary health insurance on the same basis are mainly employees of small concerns, independent merchants, self employed, and those engaged in agricultural and allied pursuits. Those engaged in seasonal occupations and migratory workers also constitute a challenge to any type of health insurance program.

Already many insurance companies and prepayment plans have undertaken both community and individual enrolment campaigns with varying degrees of success. Whether persons are enrolled as a part of a community group or as individuals, certain safeguards are necessary to protect the insurers against adverse selection and abuse. It is hoped that improved technics in enrolling and servicing other than employee group prepayment subscribers will soon approach the efficiency of those of group underwriting.

The varied and individual problems of voluntary health insurance are being studied by the Council's Correlating Committee on Prepayment Hospital and Medical Service and continued developments will be reported to the House of Delegates.

Continuing Promotion and Education.—Numerous requests for information continue to come to the council office concerning voluntary health insurance and prepayment medical care plans. These requests come not only from the profession but also from interested individuals and prepayment plans. These questions are answered in the light of past experience and continuous experiments.

The Council publication "Voluntary Prepayment Medical Care Plans" continues to be an important reference source in this field. Each revision contains more comprehensive data about the individual plans and each year the demand for the brochure exceeds that of the previous year. As a supplement, the Council publishes annually a pamphlet of Charts and Graphs. This supplemental pamphlet contains aggregate statistics concerning many phases of these programs.

Another important activity is the Council's sponsorship of the exhibit on voluntary health insurance. This exhibit has been designed as a continuing service and is carried out with the cooperation of other agencies. This exhibit has been requested

V 1
194

by many state and county societies as well as by specialty and allied professional societies.

The Council is mindful of its duty to continue to promote voluntary health insurance in the United States. In June the House of Delegates approved the Council's suggested general plan of promotion. Since that time, the Council has considered various specific programs and has submitted a broad over-all promotional program to the Board of Trustees. Consideration and approval by the Board was deemed desirable to assure harmony of policy.

There are several salient features in the suggested program of promotion and education. Continued emphasis on voluntary health insurance rather than a particular type of voluntary plan is deemed important. Realistic income limits are suggested when prepayment plans provide benefits in the form of service and cash indemnity. Other important recommendations include a wider range of selection of voluntary health plans, continued constructive competition among the various underwriting agencies in this important effort, frequent community and individual enrolment campaigns, increased availability of sound health insurance programs in some areas, equal compensation for participating and nonparticipating physicians, especially when plan benefits are in the form of cash indemnity, and reeducation of the individual relative to his responsibility to finance health care along with the other necessities of life.

Regional conferences have proved most valuable in exchanging workable ideas and in encouraging more intense local activity. In the opinion of the Council continued regional conferences could prove effective in the development of local voluntary health insurance committees. These committees could serve to evaluate all sincere and legitimate efforts in the field of voluntary health insurance whether or not the underwriting agencies had the initial sponsorship of the medical profession. The Council continues its belief that no preferential standing should be given to any one type of voluntary plan so long as minimum standards are maintained which are in the interests of the public.

By these specific activities and continued liaison with other interested groups, the Council serves the public and the profession in this important and changing subject.

MISCELLANEOUS ACTIVITIES

Suggested Health Plans and Programs have come to the attention of the Council from many sources. Each has been reviewed and considered in the light of the past policies as well as the Twelve Point Health Program. Each contains interesting points of view and ideas, some of which may be helpful in developing future policy recommendations. However, the Council prefers to withhold any recommendations until the correlating committees have had an opportunity to meet.

A study of the North Carolina Medical Care Commission's Program for the Hospital Care of Indigents and Medical Indigents was requested by the Board of Trustees. Complete information on the program is in the hands of the Correlating Committee on Indigent Care and a report will be made to the Board.

Publication and distribution of a pamphlet entitled "Veterans Home Town Medical Care Program" has been completed. This was carried out, in part, in cooperation with the staff of Associated Medical Care Plan. The pamphlet describes the chronologic development of governmental agencies up to and including the Veterans Administration. It also shows how the government has assumed its present role in financing medical care of veterans and how the medical societies and intermediaries are used in the present program.

Respectfully submitted,

JAMES R. MCVAY, Chairman.
ELMER HESS, Vice Chairman.
WALTER B. MARTIN.
J. D. MCCARTHY.
THOMAS A. MCGOLDRICK.
H. B. MULHOLLAND.
JESSE D. HAMER.
R. L. SENSENICH.
ERNEST E. IRONS.
GEORGE F. LULL.
MR. THOMAS A. HENDRICKS, Secretary.

SCIENTIFIC PROGRAM

CLINICAL PRESENTATIONS

National Guard Armory

Coordinators and Subchairmen

DR. J. ROSS VEAL, Chairman
DR. H. H. HUSSEY, Co-Chairman

SUBJECTS	COORDINATOR	SUBCHAIRMAN
Diabetes	Howard Root, Boston	John Reed, Washington, D. C.
Problems of Delivery	W. F. Mengert, Dallas, Texas	John L. Parks, Washington, D. C.
Pediatrics	Julius Hess, Chicago	Harold Hobart, Washington, D. C.
Laboratory Diagnosis, Including Exfoliative Cytology	Frank W. Konzelmann, Atlantic City, N. J.	H. H. Leffler, Washington, D. C.
Physical Medicine and Rehabilitation	Frank H. Krusen, Rochester, Minn.	Charles S. Wise, Washington, D. C.
Virus and Rickettsial Diseases	Hobart Reimann, Philadelphia	Norman Topping, Bethesda, Md.
Diseases of the Chest	J. A. Myers, Minneapolis	J. Winthrop Peabody, Washington, D. C.
Fluid Balance in Heart Failure, in Renal Impairment and Dehydration and in Shock	Robert Elman, St. Louis	Donald Stubbs, Washington, D. C.
Neurology and Psychiatry	C. Charles Burlingame, Hartford, Conn.	Zigmond M. Lebensohn, Washington, D. C.
Cardiovascular Disease, Including Hypertension and Peripheral Vascular Disorders	E. Cowles Andrus, Baltimore	Clayton B. Ethridge, Washington, D. C.
Cancer	Brewster Miller, New York	Roger M. Choisser, Washington, D. C.
Poliomyelitis	Hart E. Van Riper, New York	Lewis K. Sweet, Washington, D. C.
Hematuria	Albert E. Goldstein, Baltimore	Lloyd G. Lewis, Washington, D. C.
Arthritis	Richard H. Freyberg, New York	Darrell Crain, Washington, D. C.
Dermatology and Syphilology	Donald M. Pillsbury, Philadelphia	Frank Eichenlaub, Washington, D. C.
Roentgen Diagnosis and Treatment	Bernard P. Widmann, Philadelphia	Aubrey O. Hampton, Washington, D. C.
Liver Disease and Jaundice	Leon Schiff, Cincinnati	O. Benwood Hunter, Washington, D. C.
Chronic Diarrheas	Albert J. Sullivan, New Orleans	M. W. Perry, Washington, D. C.

TUESDAY, DEC. 6, 1949

IN ROOM 310: DIABETES

HOWARD F. ROOT, Boston, Presiding

1:30 p. m. Half-Century Experience in Diabetes.
ELLIOTT P. JOSLIN, Boston.
Symposium on the Treatment of Diabetes:
The Approach to the New Diabetic.
JOSEPH H. BARACH, Pittsburgh.
The Management of the Juvenile Diabetic.
ALEXANDER MARBLE, Boston.
Old Age and Diabetes: Consideration of Its Management.
EDWARD S. DILLON, Philadelphia.

IN ROOM 210: PROBLEMS OF DELIVERY

GEORGE NORDLINGER, Washington, D. C., Presiding

1:30 p. m. Induction of Labor.
LOUIS M. HELLMAN, Baltimore.
2:00 p. m. Obstetric Analgesia.
WILLIAM G. LEARY, Washington, D. C.
2:30 p. m. Indications for Forceps Delivery.
SAMUEL A. COSGROVE, Jersey City, N. J.
3:30 p. m. Breech Delivery.
RUSSELL J. MOE, Duluth, Minn.
4:00 p. m. Postpartum Hemorrhage.
FREDERICK H. FALLS, Chicago.
4:30 p. m. Indications for Cesarean Section.
GEORGE NORDLINGER, Washington, D. C.

IN ROOM 307: PEDIATRICS

CHARLES A. MILLWATER, Washington, D. C., Presiding

1:30 p. m. Care of the Normal Newborn Infant.
NINA A. ANDERSON, Cincinnati.
2:00 p. m. Premature Care.
GEORGE MAKSIM, Washington, D. C.
2:30 p. m. Diagnosis and Management of Cyanosis of the Newborn Infant.
WILLIAM F. O'DONNELL, Washington, D. C.
3:30 p. m. Epidemic Vomiting in Children.
J. EDMUND BRADLEY, Baltimore.
4:00 p. m. Diarrhea of the Newborn.
HORACE L. HODES, New York.
4:30 p. m. The Role of Fungi in Acute and Chronic Pulmonary Infection in Childhood.
BYRON J. OLSON, Bethesda, Md.

IN ROOM 11: LABORATORY DIAGNOSIS, INCLUDING EXFOLIATIVE CYTOLOGY

H. H. LEFFLER, Washington, D. C., Presiding

1:30 p. m. Laboratory Control of Dicumarol® Therapy.
E. CLARENCE RICE, Washington, D. C.
2:15 p. m. Biopsy Methods.
THOMAS M. PEARY, Washington, D. C.
3:30 p. m. Cytologic Diagnosis of Cancer.
J. E. ASH, Washington, D. C.
4:15 p. m. Sternal Marrow Aspirations.
J. R. KREVANS, Washington, D. C.

IN ROOM 10: PHYSICAL MEDICINE AND REHABILITATION

1:30 p. m. Opportunities in Physical Medicine and Rehabilitation for the General Practitioner.
FRANK H. KRUSEN, Rochester, Minn.
2:00 p. m. Physical Medicine in the Treatment of Common Fractures. MILAND E. KNAPP, Minneapolis.
2:30 p. m. Rehabilitation of the Hemiplegic Patient.
HOWARD A. RUSK and GEORGE DEAVER, New York.
3:30 p. m. Prescribing Physical Treatment in General Practice.
GORDON M. MARTIN, Rochester, Minn.
4:00 p. m. Physical Medicine for the Neurologic Patient in General Practice.
ARTHUR L. WATKINS, Boston.
4:30 p. m. Cerebral Palsy in General Medical Practice.
WINTHROP M. PHELPS, Baltimore.

IN ROOMS 12 AND 13: VIRUS AND RICKETTSIAL DISEASES

1:30 p. m. Collection, Preparation and Shipment of Specimens for Diagnosis of Virus and Rickettsial Diseases. MORRIS SCHAFFER, Atlanta, Ga.
1:50 p. m. Isolation and Identification of the Virus and Rickettsial Agents.
RICHARD MASON, Washington, D. C.
2:10 p. m. The Serologic Diagnosis of Virus and Rickettsial Diseases.
DORLAND DAVIS, Bethesda, Md.
2:30 p. m. Collection, Preparation and Shipment of Specimens for Diagnosis of Virus and Rickettsial Diseases. MORRIS SCHAFFER, Atlanta, Ga.
3:30 p. m. Isolation and Identification of the Virus and Rickettsial Agents.
RICHARD MASON, Washington, D. C.
3:50 p. m. The Serologic Diagnosis of Virus and Rickettsial Diseases.
DORLAND DAVIS, Bethesda, Md.
4:10 p. m. Collection, Preparation and Shipment of Specimens for Diagnosis of Virus and Rickettsial Diseases. MORRIS SCHAFFER, Atlanta, Ga.
4:30 p. m. Isolation and Identification of the Virus and Rickettsial Agents.
RICHARD MASON, Washington, D. C.
4:50 p. m. The Serologic Diagnosis of Virus and Rickettsial Diseases.
DORLAND DAVIS, Bethesda, Md.

IN ROOM 2: DISEASES OF THE CHEST

J. WINTHROP PEABODY, Washington, D. C., Presiding

1:30 p. m. Modern Treatment of Cough.
ANDREW L. BANYAI and LEON H. HIRSH, Milwaukee.
2:00 p. m. Pulmonary Infarction.
HUGH H. HUSSEY, Washington, D. C.
2:30 p. m. Silent Lesions of the Lung.
EDWIN R. LEVINE, Chicago.
3:30 p. m. Bronchiectasis and Lung Cysts.
MARTIN J. SOKOLFF, Philadelphia.
4:00 p. m. Physiologic Therapy in Bronchial Asthma and Pulmonary Emphysema, with Motion Pictures of Bronchial Asthma and Obstructive Dyspnea. ALVAN L. BARACH, New York.

IN ROOM 1: FLUID BALANCE IN HEART FAILURE, IN RENAL IMPAIRMENT AND DEHYDRATION AND IN SHOCK

DONALD H. STUBBS, Washington, D. C., Presiding

1:30 p. m. Upset Physiology in Shock.
WESTON BRUNER JR., Washington, D. C.
2:00 p. m. The Clinical Diagnosis of Shock.
DONALD H. STUBBS, Washington, D. C.

V 1
194

2:30 p. m. Laboratory Aids in the Diagnosis and Treatment of Shock.
RICHARD H. FISCHER, Washington, D. C.

3:30 p. m. Fluid Replacement in Shock with Special Reference to Arterial Transfusion.
SAM F. SEELEY, Washington, D. C.

3:55 p. m. The Biochemical Treatment of Shock.
A. C. Rink, Bethesda, Md.

4:20 p. m. Summary: Questions and Answers.
ROBERT ELMAN, St. Louis.

IN ROOM 4: NEUROLOGY AND PSYCHIATRY

C. C. BURLINGAME, Hartford, Conn., and Z. M. LEBENSOHN, Washington, D. C., Presiding

1:30 p. m. Highlights of the Neurologic Examination.
JOSEPH C. YASKIN, Philadelphia.

2:00 p. m. Today's Outlook for the Epileptic Patient.
DOUGLAS T. DAVIDSON JR., Boston.

2:30 p. m. Parkinsonism: The New Approaches.
RENÉ CAILLIET, Washington, D. C.

3:30 p. m. Practical Rehabilitation of the Paralyzed Patient.
A. B. BAKER, Minneapolis.

4:00 p. m. Home and Office Treatment of Neurosyphilis.
T. C. C. FONG, Washington, D. C.

4:30 p. m. Of What Use is the Electroencephalogram?
CHARLES HENRY, Hartford, Conn.

IN ROOM 312: CARDIOVASCULAR DISEASE, INCLUDING HYPERTENSION AND PERIPHERAL VASCULAR DISORDERS

CLAYTON B. ETHRIDGE, Washington, D. C., Presiding

1:30 p. m. Heart Disease: Practical Utilization of Differential Diagnostic Procedures.
ALBERT D. KISTIN, Washington, D. C.

2:15 p. m. The Cardiac Arrhythmias: Differential Diagnosis and Therapies.
E. COWLES ANDRUS, Baltimore.

3:30 p. m. Congestive Heart Failure: Current Concepts Covering Pathogenesis and Therapy.
WILLIAM DOCK, Brooklyn.

4:15 p. m. Acute and Chronic Cor Pulmonale.
THOMAS M. DURANT, Philadelphia.

IN ROOM 6: CANCER

ROGER M. CHOISSER, Washington, D. C. Presiding

1:30 p. m. Role of the National Government in the Control of Cancer.
AUSTIN V. DEIBERT, Washington, D. C.

1:45 p. m. The Local Health Department in the Control of Cancer.
CHARLOTTE DONLON, Washington, D. C.

2:00 p. m. Tumor Registries in the Control of Cancer.
HUGH G. GRADY, Washington, D. C.

2:15 p. m. The Family Physician in the Control of Cancer.
R. LEE SPIRE, Washington, D. C.

2:30 p. m. Voluntary Health Agencies in the Control of Cancer. CHARLES S. CAMERON, New York.

3:30 p. m. The Diagnosis of Tumors of the Breast.
CHARLES F. GESCHICKTER, Washington, D. C.

4:00 p. m. The Surgical and Radiologic Treatment of Cancer of the Breast.
CALVIN T. KLOPP, Washington, D. C.

4:30 p. m. Newer Aspects of Hormone Therapy of Cancer of the Breast.
FRANK E. ADAIR, New York.

IN ROOM 8: POLIOMYELITIS

MONTGOMERY BLAIR, Washington, D. C., Presiding

1:30 p. m. Diagnosis and Differential Diagnosis of Poliomyelitis. THOMAS GUCKER III, Boston, and PHILIP M. STIMSON, New York.
JAMES L. WILSON, Ann Arbor, Mich., Presiding

3:30 p. m. The Treatment of Respiratory Failure in Poliomyelitis. JESSIE WRIGHT, Pittsburgh, and STANLEY J. SARNOFF, Boston.

IN ROOM 3: DERMATOLOGY AND SYPHILOLOGY

1:30 p. m. Clinical Diagnosis of Syphilis.
FRANK EICHENLAUB, Washington, D. C.

2:30 p. m. Laboratory Diagnosis of Syphilis.
E. F. CHAFFEE, Washington, D. C.

3:30 p. m. Laboratory Diagnosis of Syphilis.
E. F. CHAFFEE, Washington, D. C.

4:00 p. m. Treatment of Syphilis.
DONALD M. PILLSBURY, Philadelphia.

IN ROOM 14: LIVER DISEASE AND JAUNDICE

PETER D. COMANDURAS, Washington, D. C., Presiding

1:30 p. m. Diagnostic Uses of Needle Biopsy of Liver.
LEON SCHIFF, Cincinnati.

2:30 p. m. Correlation of Needle Biopsy with Function Tests in the Differential Diagnosis of Liver Disease. IRVING BRICK, Washington, D. C.

3:30 p. m. Bile Cytology in the Diagnosis of Cancer of the Pancreas and Biliary Tract.
HENRY M. LEMON, Boston.

4:00 p. m. What Constitutes Good Biliary Tract Surgery.
PAUL KIERNAN, Washington, D. C.

4:30 p. m. Differential Diagnosis of Jaundice.
PETER D. COMANDURAS, Washington, D. C.

IN ROOM 5: CHRONIC DIARRHEAS

WILLIAM EARL CLARK, Washington, D. C., Presiding

1:30 p. m. Modern Concept of Chronic Diarrhea.
ALBERT J. SULLIVAN, New Orleans.

2:00 p. m. The Clinical Aspects of Chronic Bacterial and Protozoal Diarrheas.
JOHN TILDEN HOWARD, Baltimore.

2:30 p. m. The Clinical Aspects of Chronic Noninfectious Diarrheas.
BENJAMIN V. WHITE, Hartford, Conn.

3:30 p. m. Diarrheas of Organic Origin Other Than Bacterial and Protozoal.
GARNET W. AULT, Washington, D. C.

4:00 p. m. Nutritional and Associated Diarrheas.
IRWIN L. NORMAN, Bethesda, Md.

4:30 p. m. Considerations in Differential Diagnosis of Chronic Diarrheas.
WILLIAM T. GIBB JR., Washington, D. C.

WEDNESDAY, DEC. 7, 1949

IN ROOM 310: DIABETES

MAURICE PROTAS, Washington, D. C., Presiding

9:00 a. m. Allergic Manifestations in Diabetes.
JOSEPH T. BEARDWOOD JR., Philadelphia.

Hypoglycemia.
SAMUEL BENJAMIN, Washington, D. C.

Acidosis and Coma: Diagnosis and Treatment.
JOSEPH FAZEKAS, Washington, D. C.

JOHN A. REED, Washington, D. C., Presiding

1:30 p. m. The Diagnosis of Diabetes: Practical Problems and Considerations.
HOWARD F. ROOT, Boston.
What Shall We Feed the Diabetic?
FRANK N. ALLAN, Boston.
The Neuropathies.
CHARLES W. STYRON, Raleigh, N. C.

IN ROOM 210: PROBLEMS OF DELIVERY

J. BAY JACOBS, Washington, D. C., Presiding

9:00 a. m. Uterine Inertia.
RAYMOND T. HOLDEN, Washington, D. C.
9:30 a. m. Episiotomy and Lacerations.
FREDERICK H. FALLS, Chicago.
10:00 a. m. Forceps Delivery.
RUSSELL J. MOE, Duluth, Minn.
11:00 a. m. Management of Premature Labor.
GILBERT J. VOSBURGH, Baltimore.
11:30 a. m. Breech Delivery (Manikin).
WILLIAM T. LADY, Washington, D. C.
12:00 Noon Management of Occiput Posterior.
J. BAY JACOBS, Washington, D. C.

ROBERT H. BARTER, Washington, D. C., Presiding

1:30 p. m. Indications for Cesarean Section.
ROBERT A. COSGROVE, Jersey City, N. J.
2:00 p. m. Obstetric Analgesia and Anesthesia.
CLAYTON T. BEECHAM, Philadelphia.
2:30 p. m. Infant Resuscitation.
DONALD H. STUBBS, Washington, D. C.
3:30 p. m. Management of the Third Stage.
J. ROBERT WILLSON, Philadelphia.
4:00 p. m. Rupture of the Uterus.
JOHN L. PARKS, Washington, D. C.
4:30 p. m. Soft Tissue Obstruction of the Birth Canal.
ROBERT H. BARTER, Washington, D. C.

IN ROOM 307: PEDIATRICS

WILLIAM F. BURNICK, Washington, D. C., Presiding

9:00 a. m. Surgical Aspects of Gastrointestinal Obstruction in the Newborn and Infant.
ROBERT J. COFFEY, Washington, D. C.
9:30 a. m. Medical Management of the Surgical Child.
FREDERIC G. BURKE, Washington, D. C.
10:00 a. m. Anesthesia for Pediatric Surgery.
CHARLES E. FIERST, Washington, D. C.
11:00 a. m. Understanding of the Mother.
LEO KANNER, Baltimore.
11:30 a. m. Psychiatric Contributions to Medical Care of the Normal Child.
REGINALD S. LOURIE, Washington, D. C.
12:00 Noon Practical Consideration of Anorexia and Constipation in Children.
D. LESESNE SMITH, Spartanburg, S. C.

JOHN A. WASHINGTON, Washington, D. C., Presiding

1:30 p. m. Accidentitis: Its Causes and Prevention.
GEORGE M. WHEATLEY, New York.
2:00 p. m. Foreign Bodies in Children.
CHEVALIER L. JACKSON, Philadelphia.
2:30 p. m. Current Use of Antibiotics.
PERRIN H. LONG, Baltimore.
3:30 p. m. Special Problems of the Adolescent Child.
JOSEPH A. JOHNSTON, Detroit.
4:00 p. m. The Physician's Attitude Toward the Adolescent.
DOROTHY DONLEY-DOWD, Washington, D. C.
4:30 p. m. Diagnosis and Treatment of Tuberculosis in Children.
DANIEL L. FINUCANE, Glenn Dale, Md.

IN ROOM 11: LABORATORY DIAGNOSIS, INCLUDING EXFOLIATIVE CYTOLOGY

H. H. LEFFLER, Washington, D. C., Presiding

9:00 a. m. Spinal Fluid in Disease.
ARTHUR A. MORRIS, Washington, D. C.
9:45 a. m. Basal Metabolism Rate.
LESTER NEUMAN, Washington, D. C.
11:00 a. m. Rh Antibodies.
WILLIAM M. SILLIPHANT, Washington, D. C.
11:45 a. m. Diseases of the Kidney and Kidney Function Tests.
FRANK W. KONZELMANN, Atlantic City, N. J.

RUELL A. SLOAN, Washington, D. C., Presiding

1:30 p. m. Laboratory Control of Dicumarol® Therapy.
E. CLARENCE RICE, Washington, D. C.
2:15 p. m. Biopsy Methods.
THOMAS M. PEERY, Washington, D. C.
3:30 p. m. Cytologic Diagnosis of Cancer.
J. E. ASH, Washington, D. C.
4:15 p. m. Sternal Marrow Aspirations.
J. R. KREVANS, Washington, D. C.

IN ROOM 10: PHYSICAL MEDICINE AND REHABILITATION

9:00 a. m. Treatment of Low Back Pain.
FRANK R. OBER, Boston.
9:30 a. m. Exercise as a Therapeutic Agent in General Practice.
CHARLES S. WISE, Washington, D. C.
10:00 a. m. Physical Medicine as Related to Internal Medicine. GEORGE M. PIERSOL, Philadelphia.
11:00 a. m. The Place of Physical Devices and Apparatus in General Practice.
A. B. C. KNUDSON, Washington, D. C.
11:30 a. m. Teaching of Crutch Walking.
GEORGE DEAVER, New York.
12:00 Noon Physical Medicine in Peripheral Vascular Disease. ISADORE LEVIN, Washington, D. C.
1:30 p. m. Opportunities in Physical Medicine and Rehabilitation for the General Practitioner.
FRANK H. KRUSEN, Rochester, Minn.
2:00 p. m. Physical Medicine in the Treatment of Common Fractures. MILAND E. KNAPP, Minneapolis.
2:30 p. m. Rehabilitation of the Hemiplegic Patient.
HOWARD A. RUSK and GEORGE DEAVER, New York.
3:30 p. m. Prescribing Physical Treatment in General Practice.
GORDON M. MARTIN, Rochester, Minn.
4:00 p. m. Physical Medicine for the Neurologic Patient in General Practice.
ARTHUR L. WATKINS, Boston.
4:30 p. m. Cerebral Palsy in General Medical Practice.
WINTHROP M. PHELPS, Baltimore.

IN ROOMS 12 AND 13: VIRUS AND RICKETTSIAL DISEASES

JOSEPH E. SMADEL, Washington, D. C., Presiding

9:00 a. m. Mumps. KARL HABEL, Bethesda, Md.
9:30 a. m. Infectious Hepatitis.
JOSEPH STOKES JR., Philadelphia.
10:00 a. m. Respiratory Viruses: Influenza.
THOMAS FRANCIS JR., Ann Arbor, Mich.
11:00 a. m. Respiratory Viruses: Atypical Pneumonia.
JOHN DINGLE, Cleveland.

V 1
194

11:30 a. m. Neurotropic Viruses.
JOSEPH E. SMADEL, Washington, D. C.
Motion Picture: U. S. ARMY.

1:30 p. m. Collection, Preparation and Shipment of Specimens for Diagnosis of Virus and Rickettsial Diseases. MORRIS SCHAFFER, Atlanta, Ga.

1:50 p. m. Isolation and Identification of the Virus and Rickettsial Agents.
RICHARD MASON, Washington, D. C.

2:10 p. m. The Serologic Diagnosis of Virus and Rickettsial Diseases.
DORLAND DAVIS, Bethesda, Md.

2:30 p. m. Collection, Preparation and Shipment of Specimens for Diagnosis of Virus and Rickettsial Diseases. MORRIS SCHAFFER, Atlanta, Ga.

3:30 p. m. Isolation and Identification of the Virus and Rickettsial Agents.
RICHARD MASON, Washington, D. C.

3:50 p. m. The Serologic Diagnosis of Virus and Rickettsial Diseases.
DORLAND DAVIS, Bethesda, Md.

4:10 p. m. Collection, Preparation and Shipment of Specimens for Diagnosis of Virus and Rickettsial Diseases. MORRIS SCHAFFER, Atlanta, Ga.

4:30 p. m. Isolation and Identification of the Virus and Rickettsial Agents.
RICHARD MASON, Washington, D. C.

4:50 p. m. The Serologic Diagnosis of Virus and Rickettsial Diseases.
DORLAND DAVIS, Bethesda, Md.

IN ROOM 2: DISEASES OF THE CHEST

A. BARKLIE COULTER, Washington, D. C., Presiding

9:00 a. m. Tuberculosis and the General Practitioner.
J. ARTHUR MYERS, Minneapolis.

9:45 a. m. Chemotherapy in Tuberculosis: Its Integration with Other Procedures.
H. McLEOD RIGGINS, New York.

10:10 a. m. History of BCG and Its Present Day Problems. KONRAD BIRKHAUG, New York.

11:00 a. m. Approach to Early Diagnosis and Surgical Treatment in Chest Disease.
NORMAN WILSON, Brookline, Mass.

11:40 a. m. Comments on Mass X-Ray Surveys and Surveys of General Hospital Admissions for Pulmonary Tuberculosis.
ROBERT J. ANDERSON, Washington, D. C.

12:00 Noon Hematogenous Tuberculosis with Emphasis on the Value of Bone Marrow Study for Diagnosis. SOL KATZ, Washington, D. C.

JOHN WATKINS TRENIS, Washington, D. C., Presiding

1:30 p. m. Lipid Pneumonia. A. O. HAMPTON, THEODORE WINSHIP, EDWARD B. McCABE and EDGAR W. DAVIS, Washington, D. C.

3:00 p. m. A Panel on the Diagnosis and Treatment of the Pneumonias. HARRY F. DOWLING, THOMAS McPHERSON BROWN and MARK H. LEPPER, Washington, D. C.

(This will consist of reports of cases of pneumonia and complications of pneumonia, illustrated with lantern slides. The implications in each case will be discussed by a member of the panel. Particular stress will be given to patients who still die of pneumonia because of unsatisfactory diagnosis and treatment. Treatment with the newer antibiotics will be emphasized.)

IN ROOM 1: FLUID BALANCE IN HEART FAILURE, IN RENAL IMPAIRMENT AND DEHYDRATION AND IN SHOCK

WALTER H. MOURSUND JR., Washington, D. C., Presiding

9:00 a. m. Cardiac Mechanisms in Fluid Balance.
JACK KLEH, Washington, D. C.

9:30 a. m. Hemodynamic Changes in Heart Failure.
RENO R. PORTER, Richmond, Va.

10:00 a. m. Pulmonary Edema.
JAMES J. FEFFER, Washington, D. C.

11:00 a. m. Therapy of Heart Failure to Achieve Fluid Balance: (*a*) Fluid Replacement; (*b*) Drug Therapy Influencing Fluid Balance.
MILTON LANDOWNE, Washington, D. C.

12:00 Noon Summary: Questions and Answers.
DRS. KLEH, PORTER, FEFFER, LANDOWNE and MOURSUND.

WILLIAM L. HOWELL, Washington, D. C., Presiding

1:30 p. m. Renal Mechanisms in the Maintenance of Fluid and Electrolyte Balance.
A. C. CORCORAN, Cleveland.

2:00 p. m. Dehydration: The Role of the Kidney.
ROBERT J. SOBERMAN, Washington, D. C.

2:30 p. m. Fluid Replacement in Dehydration.
ROBERT ELMAN, St. Louis.

3:30 p. m. The Clinical Features of Acute Renal Impairment.
WILLIAM P. HERBST, Washington, D. C.

3:50 p. m. The Lower Nephron in Acute Renal Impairment. BALDWIN LUCKÉ, Philadelphia.

4:10 p. m. What to Do and What Not to Do in Acute Renal Impairment.
MAURICE B. STRAUSS, Framingham, Mass.

4:30 p. m. Questions and Answers by Members of the Panel.

IN ROOM 4: NEUROLOGY AND PSYCHIATRY

HARVEY J. TOMPKINS, Washington, D. C., Presiding

9:00 a. m. What Is Psychotherapy?
NORMAN Q. BRILL, Washington, D. C.

9:30 a. m. The Management of Anxiety.
HERBERT STAVEREN, Rockville, Md.

10:00 a. m. Psychiatric Aspects of the Medical Examination.
LEON YOCHELSON, Washington, D. C.

11:00 a. m. Physical Complaints Masking Depression.
SAMUEL V. THOMPSON, Washington, D. C.

11:30 a. m. Electroshock Therapy.
R. FINLEY GAYLE JR., Richmond, Va.

12:00 Noon Psychosurgery. HARRY C. SOLOMON, Boston.

ADDISON M. DUVAL, Washington, D. C., Presiding

1:30 p. m. The Alcoholic Patient.
ROBERT C. BURNHAM, Washington, D. C.

2:00 p. m. The Medical Patient Who Won't Cooperate.
JEROME D. FRANK, Baltimore.

2:30 p. m. What Is Psychosomatic Medicine?
DANIEL BLAIN, Washington, D. C.

3:30 p. m. The General Practitioner as the Front Line Psychiatrist.
ADDISON M. DUVAL, Washington, D. C.

4:00 p. m. When and How to Refer the Patient Who Needs Psychiatric Treatment.
Z. M. LEBENSOHN, Washington, D. C.

4:30 p. m. What to Do with the Acute Psychiatric Emergency.
HARVEY J. TOMPKINS, Washington, D. C.

IN ROOM 317: CARDIOVASCULAR DISEASE, INCLUDING HYPERTENSION AND PERIPHERAL VASCULAR DISORDERS

JOHN M. EVANS, Washington, D. C., Presiding

9:00 a. m. Rheumatic Fever: Etiology; Diagnosis; Prophylaxis; Therapy.
FRANCIS SCHWENTKER, Baltimore.

9:45 a. m. Rheumatic Valvular Heart Disease: Clinical Aspects and Management.
S. A. LEVINE, Boston.

11:00 a. m. Congenital Heart Disease: Recognition; Selection of Cases for Surgery.
HELEN TAUSSIG, Baltimore.

11:45 a. m. Cardiac Surgery: Résumé of Current Procedures and Investigations.
C. ROLLINS HANLON, Baltimore.

IRVING W. WINIK, Washington, D. C., Presiding

1:30 p. m. Bacterial Endocarditis: Diagnosis and Therapy.
HARRY F. DOWLING, Washington, D .C.

2:15 p. m. Syphilitic Cardiovascular Disease: Recognition and Management. PAUL PADGET, Baltimore.

3:30 p. m. Acute Myocarditis: Clinical Aspects; Diagnosis and Treatment.
BERNARD J. WALSH, Washington, D. C.

4:15 p. m. Pericarditis: Recognition and Management.
RALPH C. PARKER JR., Bethesda, Md.

IN ROOM 6: CANCER

WILLIAM W. AYRES, Washington, D. C., Presiding

9:00 a. m. Tumors of the Oral Cavity.
J. L. BERNIER, Washington, D. C.

9:30 a. m. The Diagnosis and Treatment of Cancer of the Stomach. H. A. GROSS, Washington, D. C.

10:00 a. m. The Surgical Treatment of Cancer of the Intestine. GARNET W. AULT, Washington, D. C.

11:00 a. m. The Significance of Abnormal Vaginal Bleeding.
WILLIAM G. LEARY JR., Washington, D. C.

11:20 a. m. The Surgical Treatment of Cancer of the Uterus. J. K. CROMER, Washington, D. C.

11:40 a. m. The Radiation Treatment of Cancer of the Uterus. FRED S. COE, Washington, D. C.

12:00 noon. Post-Menopausal Bleeding: Clinical and Pathologic Studies.
DONALD WOODRUFF, Baltimore.

IN ROOM 8: POLIOMYELITIS

LEWIS K. SWEET, Washington, D. C., Presiding

9:00 a. m. Diagnosis and Differential Diagnosis of Poliomyelitis. DAVID S. GRICE, Boston, and ROBERT B. LAWSON, Winston-Salem, N. C.

JAMES L. WILSON, Ann Arbor, Mich., Presiding

11:00 a. m. The Treatment of Respiratory Failure in Poliomyelitis. JESSIE WRIGHT, Pittsburgh, and STANLEY J. SARNOFF, Boston.

IN ROOM 14: HEMATURIA

9:00 a. m. Introduction "Hematuria."
ALBERT E. GOLDSTEIN, Baltimore.

9:15 a. m. Hematuria and Traumatism.
J. C. KIMBROUGH, Washington, D. C.

9:30 a. m. Hematuria and Prostatism.
R. N. LECOMTE, Washington, D. C.

9:45 a. m. Cancer of Kidneys, Ureters and Bladder.
W. F. LEADBETTER, Boston.

11:00 a. m. Hematuria and Calculus.
C. E. BAGLEY, Washington, D. C.

11:15 a. m. Hematuria and Infection.
T. C. THOMPSON, Washington, D. C.

11:30 a. m. Medical Aspects of Hematuria.
HAROLD J. JEGHERS, Washington, D. C.

12:15 p. m. Undiagnosed Hematuria.
ALBERT E. GOLDSTEIN, Baltimore.

IN ROOM 8: ARTHRITIS

CHARLES RYLAND, Washington, D. C., Presiding

1:30 p. m. The Early Diagnosis of Rheumatoid Spondylitis.
THOMAS MCPHERSON BROWN, Washington, D. C.

2:00 p. m. Classification and Basic Differential Points of Principal Rheumatic Diseases.
WALTER K. MYERS, Washington, D. C.

2:30 p. m. Medical (Including Physical Medical) Management of Rheumatoid Spondylitis Patient.
CHARLES S. WISE, Washington, D. C.

3:30 p. m. Orthopedic Management of Rheumatoid Spondylitis Patient.
MILTON C. COBEY, Washington, D. C.

4:00 p. m. The Present Status of Cortisone and ACTH.
EDWARD F. ROSENBERG, Chicago.

IN ROOM 3: DERMATOLOGY AND SYPHILOLOGY

1:30 p. m. Atopic Eczema.
EVERETT C. FOX, Dallas, Texas.

2:30 p. m. Industrial Dermatoses.
LOUIS SCHWARTZ, Washington, D. C.

3:30 p. m. Industrial Dermatoses.
LOUIS SCHWARTZ, Washington, D. C.

4:00 p. m. Treatment of Contact Dermatitis.
NORMAN R. INGRAHAM, Philadelphia.

IN ROOM 5: ROENTGEN DIAGNOSIS AND TREATMENT

JOSEPH F. BELAIR, Washington, D. C., Presiding

9:00 a. m. Radium and Roentgen Therapy in the Control of Vaginal Bleeding: Indications and Accomplishments.
RALPH M. CAULK, Washington, D. C.

9:30 a. m. The Problem of Endometriosis:
From the Standpoint of the Surgeon.
GARNET W. AULT, Washington, D. C.
From the Standpoint of the Gynecologist.
HENRY L. DARNER, Washington, D. C.
From the Standpoint of the Radiologist.
KARL C. CORLEY, Washington, D. C.

11:00 a. m. Roentgen Examinations as an Adjunct in Gynecology and Obstetrics.
FRED O. COE, Washington, D. C.

IN ROOM 14: LIVER DISEASE AND JAUNDICE

O. BENWOOD HUNTER JR., Washington, D. C., Presiding

1:30 p. m. Role of Porphyrins in Liver Disease.
CECIL J. WATSON, Minneapolis.

2:30 p. m. Clinical Relations of Skin Pigmentation in Liver Disease.
HAROLD J. JEGHERS, Washington, D. C.

3:30 p. m. Differential Diagnosis of Hemolytic Jaundice.
O. BENWOOD HUNTER JR., Washington, D. C.

4:00 p. m. Splenectomy: Its Use in Hemolytic States.
PAUL KIERNAN, Washington, D. C.

4:30 p. m. Uses of Newer Therapeutic Agents in Cirrhosis.
PETER D. COMANDURAS, Washington, D. C.

IN ROOM 5: CHRONIC DIARRHEAS

MATTHEW WHITE PERRY, Washington, D. C., Presiding

1:30 p. m. Modern Concept of Chronic Diarrhea.
ALBERT J. SULLIVAN, New Orleans.

2:00 p. m. The Clinical Aspects of Chronic Bacterial and Protozoal Diarrheas.
JOHN TILDEN HOWARD, Baltimore.

V 1
194

2:30 p. m. The Clinical Aspects of Chronic Noninfectious Diarrheas.
BENJAMIN V. WHITE, Hartford, Conn.

3:30 p. m. Diarrheas of Organic Origin Other Than Bacterial and Protozoal.
GARNET W. AULT, Washington, D. C.

4:00 p. m. Nutritional and Associated Diarrheas.
IRWIN L. NORMAN, Bethesda, Md.

4:30 p. m. Considerations in Differential Diagnosis in Chronic Diarrheas.
WILLIAM T. GIBB JR., Washington, D. C.

THURSDAY, DEC. 8, 1949

IN ROOM 310: DIABETES

HOWARD F. ROOT, Boston, Presiding

9:00 a. m. Anesthesias in Diabetes.
LOUIS K. ALPERT, Washington, D. C.

Surgery in the Diabetic.
LELAND S. MCKITTRICK, Brookline, Mass.

Pregnancy and Diabetes.
LAWRENCE J. THOMAS, Washington, D. C.

LOUIS K. ALPERT, Washington, D. C., Presiding

1:30 p. m. I am a Diabetic. NELSON T. CAREY, Baltimore.

Experimental Diabetes: Methods of Production and Possible Clinical Implications.
JOSEPH H. ROE, Washington, D. C.

The Brittle Diabetic.
HENRY MULHOLLAND, Charlottesville, Va.

IN ROOM 210: PROBLEMS OF DELIVERY

HOWARD P. PARKER, Washington, D. C., Presiding

9:00 a. m. Obstetric Analgesia.
CHARLES H. NASH, Washington, D. C.

9:30 a. m. Management of Multiple Pregnancy.
JEAN E. PAQUIN, Washington, D. C.

10:00 a. m. Forceps Delivery.
SAMUEL M. DODEK, Washington, D. C.

11:00 a. m. Uterine Inertia.
JAMES F. NORTON, Jersey City, N. J.

11:30 a. m. Episiotomy and Vaginal Lacerations.
JOSIAH R. EISAMAN, Pittsburgh.

12:00 noon. Management of the Third Stage.
HOWARD P. PARKER, Washington, D. C.

A. A. MARCHETTI, Washington, D. C., Presiding

1:30 p. m. Breech Delivery (Manikin).
STAFFORD W. HAWKEN, Washington, D. C.

2:00 p. m. Methods of Determining the Progress of Labor.
W. F. MENGERT, Dallas, Texas.

2:30 p. m. Management of Occiput Posterior.
JAMES A. DUSHABEK, Washington, D. C.

3:30 p. m. Indications for Cesarean Section.
F. BAYARD CARTER, Durham, N. C.

4:00 p. m. Obstetric Anesthesia.
CHARLES S. COAKLEY, Washington, D. C.

4:30 p. m. Postpartum Hemorrhage.
A. A. MARCHETTI, Washington, D. C.

IN ROOM 307: PEDIATRICS

WILLIAM S. ANDERSON, Washington, D. C., Presiding

9:00 a. m. Serious Ocular Infections of the Newborn.
FRANK D. COSTENBADER, Washington, D. C.

9:30 a. m. Pediatric Problems in Orthopedics.
CARL BERG, Washington, D. C.

10:00 a. m. The Tonsil and Adenoid Problem in Children.
EDGAR P. COPELAND and ALLAN E. WALKER, Washington, D. C.

11:00 a. m. The Treatment of Eosinophilic Granuloma by Chemotherapeutic Agents.
HAROLD W. DARGEON, New York.

11:30 a. m. Convulsions in Children.
M. G. PETERMAN, Milwaukee.

12:00 noon. Diagnostic Methods Used in the Neurologic Study of Children.
JAMES W. WATTS, Washington, D. C.

MILTON M. GREENBURG, Washington, D. C., Presiding

1:30 p. m. Breast Feeding.
HOWARD J. MORRISON, Savannah, Ga.

2:00 p. m. Artificial Infant Feeding.
JOHN F. LANDON, New York.

2:30 p. m. Modern Trends in Infant Feeding.
PRESTON A. MCLENDON, Washington, D. C.

3:30 p. m. Complications of Contagious Diseases.
ROBERT R. MACDONALD, Pittsburgh.

4:00 p. m. Immunization Procedures in Childhood.
WILLIAM A. HOWARD, Washington, D. C.

4:30 p. m. Management of the Allergic Child.
RICHARD H. TODD, Washington, D. C.

IN ROOM 11: LABORATORY DIAGNOSIS; INCLUDING EXFOLIATIVE CYTOLOGY

EUGENE R. WHITMORE, Washington, D. C., Presiding

9:00 a. m. Spinal Fluid in Disease.
ARTHUR A. MORRIS, Washington, D. C.

9:45 a. m. Basal Metabolism Rate.
M. W. ALDEN, Washington, D. C.

11:00 a. m. Rh Antibodies.
WILLIAM M. SILLIPHANT, Washington, D. C.

11:45 a. m. Diseases of the Kidney and Kidney Function Tests.
FRANK W. KONZELMANN, Atlantic City, N. J.

RICHARD E. PALMER, Washington, D. C., Presiding

1:30 p. m. Laboratory Control of Dicumarol® Therapy.
E. CLARENCE RICE, Washington, D. C.

2:15 p. m. Biopsy Methods.
THOMAS M. PEERY, Washington, D. C.

3:30 p. m. Cytologic Diagnosis of Cancer.
J. E. ASH, Washington, D. C.

4:15 p. m. Sternal Marrow Aspirations.
J. R. KREVANS, Washington, D. C.

IN ROOM 10: PHYSICAL MEDICINE AND REHABILITATION

9:00 a. m. Treatment of Low Back Pain.
FRANK R. OBER, Boston.

9:30 a. m. Exercise as a Therapeutic Agent in General Practice.
CHARLES S. WISE, Washington, D. C.

10:00 a. m. Physical Medicine as Related to Internal Medicine.
GEORGE M. PIERSOL, Philadelphia.

11:00 a. m. The Place of Physical Devices and Apparatus in General Practice.
A. B. C. KNUDSON, Washington, D. C.

11:30 a. m. Teaching of Crutch Walking.
GEORGE DEAVER, New York.

12:00 noon. Physical Medicine in Peripheral Vascular Disease.
ISADORE LEVEN, Washington, D. C.

1:30 p. m. Opportunities in Physical Medicine and Rehabilitation for the General Practitioner.
FRANK H. KRUSEN, Rochester, Minn.

2:00 p. m. Physical Medicine in the Treatment of Common Fractures.
MILARD E. KNAPP, Minneapolis.

2:30 p. m. Rehabilitation of the Hemiplegic Patient.
HOWARD A. RUSK and GEORGE DRAVER, New York.

3:30 p. m. Prescribing Physical Treatment in General Practice.
GORDON M. MARTIN, Rochester, Minn.

4:00 p. m. Physical Medicine for the Neurologic Patient in General Practice.
ARTHUR L. WATKINS, Boston.

4:30 p. m. Cerebral Palsy in General Medical Practice.
WINTHROP M. PHELPS, Baltimore.

IN ROOMS 12 AND 13: VIRUS AND RICKETTSIAL DISEASES

NORMAN TOPPING, Bethesda, Md., Presiding

9:00 a. m. Rocky Mountain Spotted Fever.
NORMAN TOPPING, Bethesda, Md.

9:30 a. m. Brill's Disease.
EDWARD S. MURRAY, Boston.

10:00 a. m. General Discussion on Q Fever.
R. E. DYER, Bethesda, Md.

11:00 a. m. Q Fever in California.
JOSEPH A. BELL, Bethesda, Md.

11:30 a. m. Rickettsialpox.
ROBERT J. HUEBNER, Bethesda, Md.

12:00 noon. Murine Typhus.
THEODORE E. WOODWARD, Baltimore.

1:30 p. m. Collection, Preparation and Shipment of Specimens for Diagnosis of Virus and Rickettsial Diseases.
MORRIS SCHAFFER, Atlanta, Ga.

1:50 p. m. Isolation and Identification of the Virus and Rickettsial Agents.
RICHARD MASON, Washington, D. C.

2:10 p. m. The Serologic Diagnosis of Virus and Rickettsial Diseases.
DORLAND DAVIS, Bethesda, Md.

2:30 p. m. Collection, Preparation and Shipment of Specimens for Diagnosis of Virus and Rickettsial Diseases.
MORRIS SCHAFFER, Atlanta, Ga.

3:30 p. m. Isolation and Identification of the Virus and Rickettsial Agents.
RICHARD MASON, Washington, D. C.

3:50 p. m. The Serologic Diagnosis of Virus and Rickettsial Diseases.
DORLAND DAVIS, Bethesda, Md.

4:10 p. m. Collection, Preparation and Shipment of Specimens for Diagnosis of Virus and Rickettsial Diseases.
MORRIS SCHAFFER, Atlanta, Ga.

4:30 p. m. Isolation and Identification of the Virus and Rickettsial Agents.
RICHARD MASON, Washington, D. C.

4:50 p. m. The Serologic Diagnosis of Virus and Rickettsial Diseases.
DORLAND DAVIS, Bethesda, Md.

IN ROOM 2: DISEASES OF THE CHEST

SOL. KATZ, Washington, D. C., Presiding

9:30 a. m. The Pathogenesis, Diagnosis and Treatment of Asthma.
MAURICE S. SEGAL, Boston.

9:45 a. m. Pleurisy with Effusion, Spontaneous Pneumothorax and Other Diseases of the Pleura.
L. L. FRIEDMAN, Birmingham, Ala.

11:00 a. m. Aerosol Therapy for Bronchopulmonary Disease.
MAURICE S. SEGAL, Boston.

11:30 a. m. Trauma of the Lungs and Pleura.
J. MAXWELL CHAMBERLAIN, New York.

12:00 noon. Recent Advances in Fungus Diseases of the Lungs.
HYMAN S. BASS, New York.

DANIEL L. FINUCANE, Glen Dale, Md., Presiding

1:30 p. m. Medications and Practical Principles in the Management of Coughs.
ALBERT WOOTH HOBBY, Atlanta, Ga.

2:00 p. m. Sarcoidosis.
SOL. KATZ, Washington, D. C.

2:30 p. m. Differential Diagnosis of Chest Pain.
HUGH H. HUSSEY, Washington, D. C.

3:30 p. m. A Panel on Pulmonary Diseases Due to Inhalation of Certain Organic and Inorganic Dusts, with Comments on the Compensation Problems.
ANTHONY J. LANZA and EDGAR MAYER, New York, and OSCAR A. SANDER, Milwaukee.

IN ROOM 3: FLUID BALANCE IN HEART FAILURE, IN RENAL IMPAIRMENT AND DEHYDRATION AND IN SHOCK

WILLIAM L. HOWELL, Washington, D. C., Presiding

9:00 a. m. Renal Mechanisms in the Maintenance of Fluid and Electrolyte Balance.
A. C. CORCORAN, Cleveland.

9:30 a. m. Dehydration: The Role of the Kidneys.
ROBERT J. SOBERMAN, Washington, D. C.

10:00 a. m. Fluid Replacement in Dehydration.
ROBERT ELMAN, St. Louis.

11:00 a. m. The Clinical Features of Acute Renal Impairment.
WILLIAM P. HARRIS, Washington, D. C.

11:20 a. m. The Lower Nephron in Acute Renal Impairment.
J. E. ASH, Washington, D. C.

11:40 a. m. What to Do and What Not to Do in Acute Renal Impairment.
MAURICE B. STRAUSS, Framingham, Mass.

12:00 noon. Questions and Answers by the Members of the Panel.

WALTER H. MOURSUND Jr., Washington, D. C., Presiding

1:30 p. m. Cardiac Mechanisms in Fluid Balance.
JACK KLEIN, Washington, D. C.

2:00 p. m. Hemodynamic Changes in Heart Failure.
RENO R. PORTER, Richmond, Va.

2:30 p. m. Pulmonary Edema.
JAMES J. FEPPER, Washington, D. C.

3:30 p. m. Therapy of Heart Failure to Achieve Fluid Balance: (a) Fluid Replacement; (b) Drug Therapy Influencing Fluid Balance.
MILTON LANDOWNE, Washington, D. C.

4:30 p. m. Summary: Questions and Answers by Drs. KLEIN, PORTER, FEPPER, LANDOWNE and MOURSUND.

IN ROOM 4: NEUROLOGY AND PSYCHIATRY

PEARCE BAILEY, Washington, D. C., Presiding

9:00 a. m. Highlights of the Neurologic Examination.
PAUL CHOMOFF, Washington, D. C.

9:30 a. m. Today's Outlook for the Epileptic Patient.
PEARCE BAILEY, Washington, D. C.

10:00 a. m. Parkinsonism: The New Approaches.
WALTER O. KLINGMAN, Richmond, Va.

11:00 a. m. Practical Rehabilitation of the Paralyzed Patient.
JOE R. BROWN, Rochester, Minn.

11:30 a. m. Migraine and Other Headaches.
LESTER BLUMENTHAL, Washington, D. C.

12:00 noon. Of What Use is the Electroencephalogram?
HAROLD STEVENS, Washington, D. C.

JOHN M. CALDWELL, Washington, D. C., Presiding

1:30 p. m. Psychiatric Aspects of the Medical Examination.
JACOB E. FINESINGER, Boston.

2:00 p. m. What is Psychosomatic Medicine?
JOHN M. CALDWELL, Washington, D. C.

2:30 p. m. What to Do with the Acute Psychiatric Emergency.
OSCAR LEGAULT, Washington, D. C.

3:30 p. m. Physical Complaints Masking Depression.
GEORGE N. RAINES, Washington, D. C.

4:00 p. m. Electroshock Therapy.
HAROLD STEVENS, Washington, D. C.

4:30 p. m. Psychosurgery.
HARRY C. SOLOMON, Boston.

IN ROOM 312: CARDIOVASCULAR DISEASE, INCLUDING HYPERTENSION AND PERIPHERAL VASCULAR DISORDERS

BENJAMIN MANCHESTER, Washington, D. C., Presiding

9:00 a. m. Arteriosclerosis: Brief Survey of Current Knowledge.
CHARLES F. WILKINSON JR., New York.

9:45 a. m. Coronary Heart Disease: Recognition of Its Various Clinical Manifestations.
CLAYTON B. ETHRIDGE, Washington, D. C.

11:00 a. m. Treatment in Coronary Heart Disease.
JAMES S. TAYLOR, Washington, D. C.

11:45 a. m. Peripheral Vascular Disorders: Diagnosis and Medical Therapies.
ANDREW G. PRANDONI, Washington, D. C.

ALBERT D. KISTIN, Washington, D. C., Presiding

1:30 p. m. Surgical Procedures in Peripheral Vascular Disorders.
J. ROSS VEAL, Washington, D. C.

2:15 p. m. Hypertension: Current Concepts and Clinical Classifications.
A. C. CORCORAN, Cleveland.

3:30 p. m. Limits of Normal Blood Pressure: The Relation of Hypertension to Coronary Disease.
A. M. MASTER, New York.

4:15 p. m. Practical Management of Hypertensive Disease: Medical and Surgical.
EDWARD D. FREIS, Washington, D. C.

IN ROOM 6: CANCER

LESTER NEUMAN, Washington, D. C., Presiding

1:30 p. m. Recent Developments in Diagnosis and Treatment of Leukemia.
J. R. KREVANS, Washington, D. C.

2:00 p. m. The Diagnosis and Treatment of Moles and Malignant Melanomas.
GEORGE T. PACK, New York.

2:30 p. m. The Diagnosis and Treatment of Carcinoma of the Lung.
BRIAN B. BLADES, Washington, D. C.

3:30 p. m. Recent Developments in Cancer Research of Interest to the General Practitioner.
HAROLD L. STEWART, Washington, D. C.

4:00 p. m. The Practitioner's Obligation in the Care of the Advanced Cancer Patient.
HERBERT S. GATES, Washington, D. C.

4:30 p. m. Recent Advances in the Use of Isotopes.
ROBERT J. SOBERMAN, Washington, D. C.

IN ROOM 8: POLIOMYELITIS

LEONARD PETERSON, Washington, D. C., Presiding

1:30 p. m. The Management of Paralytic Poliomyelitis.
JESSIE WRIGHT, Pittsburgh.

3:30 p. m. The Management of Paralytic Poliomyelitis.
JESSIE WRIGHT, Pittsburgh.

IN ROOM 14: HEMATURIA

9:00 a. m. Introduction "Hematuria."
ALBERT E. GOLDSTEIN, Baltimore.

9:15 a. m. Hematuria and Traumatism.
HILBERT S. SABIN, Washington, D. C.

9:30 a. m. Hematuria and Prostatism.
H. A. GOLDBERG, Washington, D. C.

9:45 a. m. Cancer of Kidneys, Ureters and Bladder.
FRED K. GARVEY, Winston Salem, N. C.

11:00 a. m. Hematuria and Calculus.
DABNEY JARMAN, Washington, D. C.

11:15 a. m. Hematuria and Infection.
F. A. REUTER, Washington, D. C.

11:30 a. m. Medical Aspects of Hematuria.
T. J. ABERNATHY, Washington, D. C.

12:15 p. m. Undiagnosed Hematuria.
ALBERT E. GOLDSTEIN, Baltimore.

IN ROOM 8: ARTHRITIS

CHARLES H. MCENERNEY, Washington, D. C., Presiding

9:00 a. m. Differential Diagnosis of Painful Conditions of Shoulder.
DARRELL C. CRAIN, Washington, D. C.

9:30 a. m. Management of Painful Conditions of Shoulder.
WILLIAM J. TOBIN, Washington, D. C.

10:00 a. m. Diagnosis of Osteoarthritis.
CHARLES W. WAINWRIGHT, Baltimore.

11:00 a. m. Management of Osteoarthritic Patient.
J. LAWN THOMPSON JR., Washington, D. C.

11:30 a. m. The Present Status of Cortisone and ACTH.
EDWARD J. ROSENBERG, Chicago.

IN ROOM 3: DERMATOLOGY AND SYPHILOLOGY

1:30 p. m. Deep Fungus Infections.
ALFRED M. KLIGMAN, Philadelphia.

2:30 p. m. Treatment of Pyogenic Infections.
WALTER O. TEICHMANN, Washington, D. C.

3:30 p. m. Treatment of Pyogenic Infections.
WALTER O. TEICHMANN, Washington, D. C.

4:00 p. m. Drug Eruptions.
HARRY M. ROBINSON JR., Baltimore.

IN ROOM 5: ROENTGEN DIAGNOSIS AND TREATMENT

EUGENE J. MCDONALD, Washington, D. C., Presiding

9:00 a. m. Mucosal Pattern of the Stomach.
WILLY E. BAENSCH, Washington, D. C.

9:30 a. m. Tinea Capitus: Microsporon Audouini.
ISIDORE LATTMAN, Washington, D. C.

10:00 a. m. Lymphadenopathy: Causes and Treatment.
KEENE M. WALLACE, Washington, D. C.

11:00 a. m. Early Recognition and Prevention of Cancer of the Colon: Clinical, Proctoscopic and Roentgenologic Approach.
GEORGE M. WYATT and RALPH M. CAULK, Washington, D. C.

11:30 a. m. The Radiological Examination Indicated for Localized and Referred Abdominal Pain.
ALFRED A. J. DEN and THOMAS BRADLEY, Washington, D. C.

IN ROOM 14: LIVER DISEASE AND JAUNDICE

PAUL KIERNAN, Washington, D. C., Presiding

1:30 p. m. Present Concepts of Chronic Hepatitis.
JOHN R. NEEFE, Philadelphia.

2:30 p. m. Role of Blood and Blood Derivatives in the Therapy of Liver Disease.
JOHN B. ROSS, Washington, D. C.

3:30 p. m. Needle Biopsy of Liver.
IRVING BRICK, Washington, D. C.

4:00 p. m. Hepatomegaly.
HAROLD J. JEGHERS, Washington, D. C.

4:30 p. m. Laboratory Aids in the Differential Diagnosis of Jaundice.
O. BENWOOD HUNTER JR., Washington, D. C.

IN ROOM 5: CHRONIC DIARRHEAS

MAURICE H. FRIEDMAN, Washington, D. C., Presiding

1:30 p. m. Modern Concept of Chronic Diarrhea.
ALBERT J. SULLIVAN, New Orleans.

2:00 p. m. The Clinical Aspects of Chronic Bacterial and Protozoal Diarrheas.
JOHN TILDEN HOWARD, Baltimore.

2:30 p. m. The Clinical Aspects of Chronic Noninfectious Diarrheas.
BENJAMIN V. WHITE, Hartford, Conn.

3:30 p. m. Diarrheas of Organic Origin Other Than Bacterial and Protozoal.
GARNET W. AULT, Washington, D. C.

4:00 p. m. Nutritional and Associated Diarrheas.
IRWIN L. NORMAN, Bethesda, Md.

4:30 p. m. Considerations in Differential Diagnosis in Chronic Diarrheas.
WILLIAM T. GIBB JR., Washington, D. C.

FRIDAY, DEC. 9, 1949

IN ROOM 310: DIABETES

SAMUEL BENJAMIN, Washington, D. C., Presiding

10:00 a. m. The Insulins.
SAMUEL SUGAR, Washington, D. C.

Additional Aids for the Good Management of Your Diabetic Patient.
MAURICE PROTAS, Washington, D. C.

Vascular Complications in the Diabetic.
WILLIAM R. JORDAN, Richmond, Va.

IN ROOM 210: PROBLEMS OF DELIVERY

JOHN W. WALSH, Washington, D. C., Presiding

9:00 a. m. Management of Premature Labor.
PETER COMMINGS, Washington, D. C.

9:30 a. m. Forceps Delivery (Manikin).
JOHN W. WALSH, Washington, D. C.

10:00 a. m. Vaginal Lacerations and Episiotomy.
LOUIS H. DOUGLASS, Baltimore.

11:00 a. m. Breech Delivery.
F. BAYARD CARTER, Durham, N. C.

11:30 a. m. Management of the Third Stage.
JOHN E. SAVAGE, Baltimore.

12:00 noon. Infant Resuscitation.
JOSEPH KREISELMAN, Washington, D. C.

IN ROOM 307: PEDIATRICS

JOHN E. CASSIDY, Washington, D. C., Presiding

9:00 a. m. The Diagnosis and Treatment of Leukemia in Children.
SIDNEY FARBER, Boston.

9:30 a. m. New Methods of Diagnosis and Treatment of Erythroblastosis Fetalis.
LOUIS K. DIAMOND, Boston.

10:00 a. m. Demonstration of Replacement Transfusion Technic in Infants.
JOHN B. ROSS, Washington, D. C.

11:00 a. m. Diagnosis and Management of Rheumatic Fever.
MARK P. SCHULTZ, Bethesda, Md.

11:30 a. m. Clinical Manifestations of Rheumatic Fever.
RACHAEL ASH, Philadelphia.

12:00 noon. The Relation of the General Practitioner to the Objectives of the Midcentury White House Conference on Children and Youth.
HENRY F. HELMHOLZ, Rochester, Minn.

IN ROOM 11: LABORATORY DIAGNOSIS, INCLUDING EXFOLIATIVE CYTOLOGY

THEODORE WINSHIP, Washington, D. C., Presiding

9:00 a. m. Spinal Fluid in Disease.
ARTHUR A. MORRIS, Washington, D. C.

9:45 a. m. Basal Metabolism Rate.
WILLIAM DOLAN JR., Washington, D. C.

11:00 a. m. Rh Antibodies.
WILLIAM M. SILLIPHANT, Washington, D. C.

11:45 a. m. Diseases of the Kidney and Kidney Function Tests.
FRANK W. KONZELMANN, Atlantic City, N. J.

IN ROOM 10: PHYSICAL MEDICINE AND REHABILITATION

9:00 a. m. Treatment of Low Back Pain.
FRANK R. OBER, Boston.

9:30 a. m. Exercise as a Therapeutic Agent in General Practice.
CHARLES S. WISE, Washington, D. C.

10:00 a. m. Physical Medicine as Related to Internal Medicine.
GEORGE M. PIERSOL, Philadelphia.

11:00 a. m. The Place of Physical Devices and Apparatus in General Practice.
A. B. C. KNUDSON, Washington, D. C.

11:30 a. m. Teaching of Crutch Walking.
GEORGE DEAVER, New York.

12:00 noon. Physical Medicine in Peripheral Vascular Disease.
ISADORE LEVIN, Washington, D. C.

IN ROOMS 12 AND 13: VIRUS AND RICKETTSIAL DISEASES

THEODORE E. WOODWARD, Baltimore, Presiding

9:00 a. m. Therapy of Rocky Mountain Spotted Fever.
SYDNEY ROSS, Washington, D. C.

9:30 a. m. Therapy of Murine Typhus.
EMANUEL B. SCHOENBACH, Baltimore.

10:00 a. m. Therapy of Atypical Pneumonia and Psittacosis.
YALE KNEELAND JR., New York.

11:00 a. m. Therapy of Lymphogranuloma Venereum.
RAYMOND C. V. ROBINSON, Baltimore.

11:30 a. m. Limitations of Therapy.
FREDERICK BANG, Baltimore.

12:00 noon. Round Table and Questions.

IN ROOM 2: DISEASES OF THE CHEST

FRANK S. ASHBURN, Washington, D. C., Presiding

9:00 a. m. Pulmonary Hemorrhage.
OSLER A. ABBOTT, Emory University, Ga.

9:30 a. m. The Surgical Management of Bronchiectasis.
HERBERT C. MAIER, New York.

10:00 a. m. The Surgical Treatment of Lung Abscess.
ROY G. KLEPSER, Washington, D. C.

11:00 a. m. Bronchial Obstruction: Clinical and Bronchoscopic Observations (Motion Picture and Lantern Demonstration).
PAUL H. HOLINGER, Chicago.

V 1
194

11:45 a. m. Clinical Aspects of Pulmonary and Mediastinal Neoplasms. FOSTER MURRAY, Brooklyn.

IN ROOM 1: FLUID BALANCE IN HEART FAILURE, IN RENAL IMPAIRMENT AND DEHYDRATION AND IN SHOCK

DONALD H. STUBBS, Washington, D. C., Presiding

9:00 a. m. Upset Physiology in Shock.
WESTON BRUNER JR., Washington, D. C.

9:30 a. m. The Clinical Diagnosis of Shock.
DONALD H. STUBBS, Washington, D. C.

10:00 a. m. Laboratory Aids in the Diagnosis and Treatment of Shock.
RICHARD H. FISCHER, Washington, D. C.

11:00 a. m. Fluid Replacement in Shock, with Special Reference to Arterial Transfusions.
SAM F. SEELEY, Washington, D. C.

11:25 a. m. The Biochemical Treatment of Shock.
A. G. RINK, Bethesda, Md.

11:50 a. m. Summary: Questions and Answers.
ROBERT ELMAN, St. Louis.

IN ROOM 4: NEUROLOGY AND PSYCHIATRY

GEORGE N. RAINES, Washington, D. C., Presiding

9:00 a. m. The Alcoholic Patient.
ROBERT C. BURNHAM, Washington, D. C.

9:30 a. m. The Management of Anxiety.
BERNARD A. CRUVANT, Washington, D. C.

10:00 a. m. What is Psychotherapy?
SEYMOUR J. ROSENBERG, Washington, D. C.

11:00 a. m. Home and Office Treatment of Neurosyphilis.
JOSEPH EARLE MOORE, Baltimore.

11:30 a. m. The General Practitioner as the Front Line Psychiatrist.
WINFRED OVERHOLSER, Washington, D. C.

12:00 noon. When and How to Refer the Patient Who Needs Psychiatric Treatment.
ROBERT W. WEBB, Washington, D. C.

IN ROOM 312: CARDIOVASCULAR DISEASE, INCLUDING HYPERTENSION AND PERIPHERAL VASCULAR DISORDERS

BERNARD J. WALSH, Washington, D. C., Presiding

9:00 a. m. Neurocirculatory Asthenia and Cardiac Neurosis.
IRVING W. WINIK, Washington, D. C.

9:45 a. m. The Heart in Endocrine Disorders and Dietary Deficiencies.
JOHN M. EVANS, Washington, D. C.

11:00 a. m. Heart Disease and Pregnancy: Management.
BENJAMIN MANCHESTER, Washington, D. C.

11:45 a. m. The Cardiac Patient and Surgery.
ALPHONSE MCMAHON, St. Louis.

IN ROOM 14: HEMATURIA

9:00 a. m. Introduction "Hematuria."
ALBERT E. GOLDSTEIN, Baltimore.

9:15 a. m. Hematuria and Traumatism.
HERBERT WOLFF, Alexandria, Va.

9:30 a. m. Hematuria and Prostatism.
H. N. DORMAN, Washington, D. C.

9:45 a. m. Cancer of Kidneys, Ureters and Bladder.
HUGH JEWETT, Baltimore.

11:00 a. m. Hematuria and Calculus.
L. R. CULBERTSON, Washington, D. C.

11:15 a. m. Hematuria and Infection.
EDWARD FERGUSON, Washington, D. C.

11:30 a. m. Medical Aspects of Hematuria.
ARNOLD MCNITT, Washington, D. C.

12:15 p. m. Undiagnosed Hematuria.
ALBERT E. GOLDSTEIN, Baltimore.

IN ROOM 8: ARTHRITIS

DONALD INGHAM, Washington, D. C., Presiding

9:00 a. m. The Clinical Patterns of Rheumatoid Arthritis.
THOMAS MCPHERSON BROWN, Washington, D. C.

9:30 a. m. Pathology of Rheumatoid Arthritis as Related to Symptomatology.
LENT JOHNSON, Washington, D. C.

10:00 a. m. Roentgen Picture of Rheumatoid Arthritis.
GEORGE WYATT, Washington, D. C.

11:00 a. m. Medical Management of Patient with Rheumatoid Arthritis.
DARRELL C. CRAIN, Washington, D. C.

11:30 a. m. Physical Medicine in Rheumatoid Arthritis.
ISADORE LEVIN, Washington, D. C.

12:00 noon. Orthopedic Management of Patient with Rheumatoid Arthritis.
CARL BERG, Washington, D. C.

IN ROOM 5: ROENTGEN DIAGNOSIS AND TREATMENT

AUBREY O. HAMPTON, Washington, D. C., Presiding

9:00 a. m. Bronchial Occlusion and Spatial Rearrangement Within the Chest.
HAROLD I. AMORY, Washington, D. C.

9:30 a. m. The Diagnosis and Treatment of Bronchiectasis.
ARTHUR C. CHRISTIE and FRANK S. ASHBURN, Washington, D. C.

11:00 a. m. The Correlation of Roentgen with Clinical Findings in the Diagnosis of Heart Disease.
WILLIAM W. STANBRO and JOHN M. EVANS, Washington, D. C.

11:30 a. m. Pneumonia Due to Mineral Oils (Lipid Pneumonia).
THEODORE WINSHIP, EDWARD B. MCCABE and AUBREY O. HAMPTON, Washington, D. C.

TELEVISION

There will be television broadcasts from Washington, D. C. and from Baltimore.

GRASS ROOTS CONFERENCE

The Sixth National Conference of County Medical Society Officers will be held in Washington, D. C., during the Clinical Session of the American Medical Association. The meeting is scheduled for December 8 at 8:00 p. m., in the Presidential Ballroom of the Hotel Statler. All doctors and their wives are invited to attend.

COMMUNITY HEALTH LEADERSHIP

Outstanding Local Achievements

The Miracle of Flint.
A. L. TUURI, Medical Director, Mott Children's Center, Flint, Mich.

Erie County Rings the Bell.
ROY L. SCOTT, President, Medical Society of the County of Erie, Buffalo, N. Y.

National Programs Depend on Local Achievements

The American Legion's Community Development Program.
GEORGE N. CRAIG, National Commander, The American Legion, Brazil, Ind.

The Program of the United Mine Workers.
WARREN F. DRAPER, Executive Medical Officer, Welfare and Retirement Fund, U. M. W. of America, Washington, D. C.

The Doctor's Prognosis.
JOSEPH WALL, Past President, Medical Society of the District of Columbia, Washington, D. C.

This program should be of interest not only to every medical society officer but also to every member. Community Health Leadership—the cooperation of doctors and laymen where it is needed most and can accomplish the most—is the theme.

THE SCIENTIFIC EXHIBIT

The Scientific Exhibit is located in Drill Hall, National Guard Armory, adjacent to the Technical Exhibit and Clinical Presentation Rooms.

Exhibits have been selected for their interest to the physician in the general practice of medicine and have been correlated with the clinical presentations so far as possible.

The Scientific Exhibit opens at noon Tuesday, December 6, and closes at 12:00 noon, Friday, December 9. It will be open on the intervening days from 8:30 a. m. to 6:00 p. m.

The office of the Committee on Scientific Exhibit is located in Space 103.

Committee on Scientific Exhibit.
Dwight H. Murray, Chairman.
E. J. McCormick.
F. J. L. Blasingame.
Morris Fishbein, ex officio.
George F. Lull, ex officio.
Thomas G. Hull, Director.

J. E. Smadel, Army Medical Department Research and Graduate School, Army Medical Center, Washington, D. C.:

Chloramphenicol: The exhibit consists of charts, posters and photographs showing the latest findings and results in the use of chloramphenicol.

Henry W. Edmonds, Armed Forces Institute of Pathology, Washington, D. C.:

Registry of Cardiovascular Pathology: The exhibit presents information concerning the Registry of Cardiovascular Pathology as a division of the American Registry of Pathology, a department within the Armed Forces Institute of Pathology, under the auspices of the National Research Council.

Lieut. Col. F. A. Todd, Veterinary Division, Office of the Surgeon General, Department of the Army, Washington, D. C.:

Rabies—Approved Methods for Control and Diagnosis: The exhibit consists of transparencies showing the distribution and incidence of rabies in the United States, control measures, laboratory procedure for diagnosis and approved methods of treatment of persons who have been exposed to rabid animals and those suspected of having the disease.

Lall G. Montgomery, American Society of Clinical Pathologists, Muncie, Ind.:

Certification of Medical Technologists—National Qualifying Board for Medical Laboratory Workers: The exhibit shows the functions and activities of the Board of Registry of Medical Technologists of the American Society of Clinical Pathologists and its work of setting standards for medical laboratory workers. Booklets of information, lists of approved schools of Medical Technology, charts showing statistics on salaries and distribution of registrants are included.

Frank S. Ashburn, Richard H. Fischer and O. Benwood Hunter Jr., Doctors Hospital, Washington, D. C.:

Correlation of Cytology with Pathologic Lesions: The exhibit demonstrates a correlation of vaginal and sputum cytology with the associated pathologic lesions. An example of carcinoma in situ of the cervix diagnosed by cytologic technics and missed by biopsy technics and the reasons for missing the diagnosis histologically is demonstrated. The roentgenogram, sputum cytology and gross and microscopic pictures of the tumor are of representative cases of carcinoma of the lung. Technics and reasons for using cytology in conjunction with other diagnostic procedures are presented.

Section on Pathology and Laboratory Medicine of the Medical Society of the District of Columbia and the Washington Society of Pathologists, Washington, D. C.: A series of practical laboratory demonstrations will be given, including the following subjects:

Basal Metabolism: Correct method of performing tests; proper method of preparing patient in detail; interpretation in various diseases.

Sternal Marrow Aspirations: Technic, other sources of aspiration; diseases in which the procedure is useful.

Cytological Diagnosis of Cancer: Technic; advantages and disadvantages.

Acid Base Balance: Determination of total base by Sunderman method; plasma carbon dioxide.

Office Bacteriology: Procedures which the physician in general practice can do in his office; technic will be included.

Test of Hepatic Function: Intravenous phenolsulfonphthalein test; urea clearance; urea concentration and office test; Mosenthal and Fishberg test; Addis count.

Chlorides in Disease: Determination of blood and urine chlorides.

Diagnosis of Diabetes: Glucose tolerance; insulin tolerance, epinephrine tolerance; simple blood and urine test for glucose; simple blood and urine ketone test.

Rh Antibodies: Their classification and significance; procedures for making tests.

Opportunity will be given for instruction in making the tests, both to pathologists and to general practitioners in the conduct of small office laboratories. Applications of the results of the tests in the diagnosis and treatment of disease will be emphasized.

A complete library of books and periodicals dealing with clinical pathology will be on display for consultation by visitors.

A group of competent pathologists will be on duty continuously throughout the meeting in the various demonstration booths.

Miland E. Knapp and Ralph Worden, University of Minnesota, Minneapolis:

Physical Medicine and Rehabilitation in Fractures: Colles fracture was selected as a typical fracture requiring proper treatment and rehabilitation. The exhibit indicates the steps necessary in the reduction, splinting, physical therapy, occupational therapy and vocational rehabilitation of this fracture. It emphasizes the physiologic aspect of the care of fractures. Working models to show the effect of motion on circulation of the blood and lymphatics are presented.

Sedgwick Mead and Alex Harell, Washington University School of Medicine, St. Louis:

Physical Treatment of Low Back Pain: A study of the factors contributing to "chronic low backache" will be presented. Methods of physical treatment and rehabilitation will be demonstrated. Anatomic studies, electromyographic studies and physical therapeutic procedures will be discussed.

Howard A. Rusk, George G. Deaver, Donald A. Covalt and John F. Daly, New York University College of Medicine; Lawrence J. Linck and Jayne Shover, National Society for Crippled Children and Adults, and Herbert Koepp Baker, American Speech and Hearing Association:

Exhibit Symposium on Speech Rehabilitation: The exhibit will consist of four booths on different aspects of speech rehabilitation, cleft palate, cerebral palsy, articulation and stuttering. Each booth will be manned by a medical specialist particularly interested in that specific speech disorder, a speech pathologist and cases suffering from the various speech difficulties.

A. B. C. Knudson, Aram Glorig and Merle Ansberry, Physical Medicine Rehabilitation Division, Veterans Administration, Washington, D. C.:

Rehabilitation of the Hard of Hearing: This exhibit includes a demonstration of testing methods and an illustration of the complete program of hearing rehabilitation, including selection of hearing aids, speech reading, auditory training and speech conservation. Types of hearing aids and individual ear pieces will be exhibited also.

GORDON M. MARTIN and FRANK H. KRUSEN, Mayo Clinic, Rochester, Minn.:

Therapeutic Exercise: The exhibit will demonstrate the importance of therapeutic exercise as a clinical measure for use in many conditions seen in general practice. Actual programs of exercise as applied to several common pathologic conditions will be shown. The requirements for successful employment of therapeutic exercise will be presented.

LAWRENCE J. LINCK, National Society for Crippled Children and Adults, Chicago:

Nationwide Services for the Handicapped—Three Point Program: The exhibit deals with the nationwide services that the National Society offers through its more than 2,000 state and local affiliates to the handicapped, with special emphasis on cerebral palsy. Live demonstrations with crippled children will be presented and a group of professional therapists on the staff of the National Society will be available for consultation.

J. R. GARNER, Posture Research Institute, Inc., Elkhart, Ind.:

The Effects of Posture on the Human Body: The exhibit consists of graphs, drawings, roentgenograms, photographs, descriptions, pictures and diagrams dealing with different phases of the effects of posture on the human body.

HOWARD A. CARTER, Council on Physical Medicine and Rehabilitation, American Medical Association, Chicago:

Physical Medicine and Rehabilitation—Biophysics: An oscillator capable of generating electrical stimulations from 100 to 50,000 cycles per second will demonstrate the effect of alternating currents of varying frequency on the tissues. An instrument will be provided to show the resistance of the skin. The effect on the capillaries of heat and massage will be demonstrated by means of a special microscope.

VETERANS ADMINISTRATION HOSPITAL, Minneapolis, Minn.:

Retraining Therapy for Neurologic Disabilities: An exhibit illustrating the principles, types of treatment and results of treatment for disabling neurologic disabilities. Passive movement, active motion, resistance exercises, ambulation exercises, self care activities and social and vocational training are included in the treatment for hemiplegia, ataxias and multiple sclerosis, parkinsonism, flaccid paralysis and paraplegia. The exhibit is amplified by a film strip and by demonstrations with several patients.

A. F. CASTRO, GARNET W. AULT and ROBERT S. SMITH, Georgetown University School of Medicine, Washington, D. C.:

Adenomas of the Colon and Rectum—Pathology and Treatment: The exhibit includes specimens, photographs of specimens, roentgenograms, charts and drawings showing and emphasizing the diagnosis and types of treatment used in over 300 adenomas of the colon and rectum.

EVELYN YOUNG, District of Columbia Division, American Cancer Society, Inc., Washington, D. C.:

Cancer Detection in General Practice: This exhibit emphasizes the points in cancer detection "How You Can See, How You Can Feel and How You Can Hear," and advocates that every suspicious lesion be examined by a competent pathologist. Care taken in obtaining a good specimen will pay big dividends in more accurate diagnosis.

HERBERT WILLY MEYER and STEPHEN L. GUMPORT, Post-Graduate Medical School, New York University-Bellevue Medical Center, New York:

Cancer of the Breast: The exhibit shows historical aspects, differential diagnosis, principles of operation, criteria of operability, principles of cancer surgery technic, technic of radical mastectomy, palliative surgery for advanced or inoperable cancer of breast and hormone therapy for inoperable cancer of the breast.

B. S. OPPENHEIMER, E. T. OPPENHEIMER and A. P. STOUT, Columbia University, New York:

Sarcomas Induced in Rodents by Implanting Cellophane® or Polyethylene: Regenerated cellulose film (cellophane®) was implanted either subcutaneously or wrapped around one kidney of albino rats and on mice. Malignant tumors developed in about 35 per cent of the rats that survived the minimum time for induced tumors to appear after implantation of the cellulose film. The tumors were mostly fibrosarcomas. (The incidence of spontaneous sarcomas in rats is under 1 per cent.) Illustrations of the transplantability of the malignant tumors, the gross specimens and photomicrographs will be presented. The foregoing results should be taken into consideration in the surgical implantation of cellophane® or polyethylene in man.

ALEXANDER SYMEONIDIS, National Cancer Institute, Bethesda, Md.:

Experimentally Induced Eclampsia-like Condition in Rats: The exhibit presents transparencies in color of lesions of the liver, kidney and placenta, specimens mounted in plastic and a graphic illustration of the female body.

JOSEPH I. KEMLER and DAVID DAVIS, Sinai Hospital, Baltimore:

Bilateral Thyrotomy for Carcinoma of the Larynx—A New Procedure for Cancer of the Larynx: The exhibit shows drawing of carcinomas of the larynx suitable for the operation, biopsy in the indirect method, photomicrographs of specimens and plates of the different steps of the operation. A drawing of the larynx after operation is presented. Recorded speeches of patients made postoperatively are included.

MAJOR EDDY D. PALMER, M.C., United States Army, and PHYLLIS J. ANDERSON, Walter Reed General Hospital, Washington, D. C.:

Gastroscopic Views—Stomach Disease as Diagnosed by Gastroscopy: The exhibit presents illustrations of 56 gastroscopic views with the diagnosis of each. Gastroscope in place in moulage figure with illuminated view of gastric wall illustrates use and area seen by this method. Sketch indicates anatomic relationships of the instrument when in place.

ARTHUR A. MICHELE and FREDERICK J. KRUEGER, United States Marine Hospital, Staten Island, N. Y.:

Vertebral Body Biopsy vs. Roentgen Diagnosis: A trephine method for biopsy is presented. A series of approximately 10 cases will be presented wherein the vertebral body lesion diagnosis was left for the roentgenologist. There was no laboratory confirmation and no concomitant lesions or findings which would corroborate the roentgen observations. Roentgenograms of the lesion and a clinical summary are presented. After all available data has been presented a photomicrograph with a diagnosis is shown. The exhibit will demonstrate the need for an accurate diagnosis in vertebral body lesions for proper therapy, prognosis and in medical legal aspects of immensurable lesions.

HIRSCH MARKS, New York City Cancer Institute, New York:

Irradiation of Cancer Through A Grid: A new method of treatment of multicentric irradiation subdivides large portals into 1 by 1 cm. or 2 by 2 cm. fields, thereby diminishing backscattering, increasing skin tolerance and permitting application of higher roentgen dosage. This results in greater absorption of radiating energy in upper stratums of the tumor. In a case of metastatic epidermoid carcinoma of left supraclavicular region, primary unknown, with superior sulcus tumor syndrome, simultaneous multicentric irradiation led to gradual reduction in the size of the tumor, in centimeter by centimeter layers. Despite a high daily dosage, severe erythema of the skin appeared only at the end of the treatment, followed by desquamation and denudation. In eight weeks there was complete epithelialization

of the skin, total eradication of the tumor and disappearance of pain in the left upper extremity and restoration of function to normal.

CLEVELAND J. WHITE, Stritch School of Medicine, Loyola University, Chicago, and ROBERT H. HARRIS, Long Beach, Calif.:

Diseases of the Nails—Further Clinical Studies and Observations: Many cutaneous disorders affect the nails, and often the nails alone are involved. Some general diseases profoundly involve the nails. The exhibit includes studies which have been continued along all these lines.

DAVID M. COHEN and MILTON GOLDIN, Chicago Medical School and Mount Sinai Hospital, Chicago:

Superficial Fungus Infections—Methods of Diagnosis: The exhibit consists of photographs, charts and apparatus emphasizing cases which clinically suggest the possibility of a fungus infection and the steps to be taken to make an accurate diagnosis as to the genera and species. Although treatment on clinical suspicion may at times be necessary, a confirmed diagnosis is advisable. Since superficial fungus diseases are so prevalent, this subject deserves the attention of all physicians.

WALTER I. BUCHERT and GEORGE H. JONES, Geisinger Memorial Hospital and Clinic, Danville, Penna.:

Hematuria: A demonstration is presented of the more common urologic causes of hematuria, including a schematic drawing listing all the possible causes of hematuria. Roentgenograms, photomicrographs, photograph of gross specimens and clinical data are used to present actual causes demonstrating some of the commoner causes of hematuria.

FREDERICK A. REUTER, W. DABNEY JARMAN, EDWARD E. FERGUSON and L. R. CULBERTSON, George Washington University School of Medicine, Washington, D. C.:

Urography—Necessity for Complementary Retrograde or Intravenous Urogram: A false sense of security often is felt in the presence of pyelograms which, in fact, are inadequate; these should be complemented, or confirmed, by additional studies, either retrograde or intravenous, as the case may be. The exhibit illustrates this by selected pyelograms showing serious as well as insignificant conditions wherein diagnosis had not been possible without the more complete examination.

WILLIAM BICKERS, Richmond, Va.:

Uterine Contractions and Fertility: A series of charts will illustrate various patterns of uterine contractions in human beings and animals and a comparison drawn between the pattern seen in highly fertile animals and that seen in sterile or relatively sterile women. Suggestions on treatment are given.

FREDERICK H. FALLS and CHARLOTTE S. HOLT, University of Illinois and Illinois State Department of Public Health, Chicago:

Breech Presentation: Breech presentation is depicted in relation to its etiologic aspects, diagnosis, pathologic changes and management, including fetal and maternal considerations and normal mechanism of breech.

A. S. WIENER and I. B. WEXLER, Jewish Hospital of Brooklyn, Brooklyn:

Erythroblastosis Fetalis—Antenatal Diagnosis and Treatment by Exchange Transfusion: Charts present the serology of the eight Rh types and the 27 Rh-Hr types and their hereditary transmission. Charts explain the different methods of testing for and titrating Rh antibodies in the maternal serum, as well as for determining whether the husband is homozygous or heterozygous with respect to the Rh factor. The technic of performing exchange transfusion is presented, and the results in more than 65 cases of erythroblastosis fetalis are summarized. These show a substantial reduction in the mortality rate as compared with results with other methods of treating the disease.

ARCHIBALD PERRIN HUDGINS, Charleston, W. Va.:

Early Ambulation and Perineal Care—Obstetric and Gynecologic Questionnaire Reports: Questionnaires were sent to all United States obstetricians and gynecologists and to a representative group of general surgeons and general practitioners. The purpose was to determine the present thought and reactions toward (1) early ambulation and (2) postoperative perineal care. The results have been tabulated.

JONAS WEISSBERG, THOMAS H. MCGAVACK, A. M. SHEARMAN and I. J. DREKTER, New York Medical College, Metropolitan Hospital Research Unit, Welfare Island, N. Y.:

Potassium in Diabetes—Uncontrolled and Controlled Diabetic Ketosis and Acidosis: This exhibit will be a résumé of the changes in potassium balance obtained in 13 diabetic patients before and after the institution of adequate insulin and fluid therapy. The therapeutic implications will be presented: (1) the recognition of the "potassium-depletion syndrome," (2) frequent determinations of potassium in the serum should be made during the actively treated diabetic acidotic state and (3) the administration of potassium parenterally only when the serum level falls to critical or "near critical" levels.

LESTER J. PALMER, Seattle, JOHN A. REED, Washington, D. C., and FRANK N. ALLAN, Boston:

Diabetes: The American Diabetes Association, an organization of over 1,200 physicians and others interested in diabetes, strives to promote more widespread interest in the problems of diabetic persons among the medical profession. The purpose of its Diabetes Detection Drive is to bring to medical attention the million persons with undiagnosed diabetes and the many others known to have diabetes who neglect treatment. The standards of diagnosis approved by the Council of the American Diabetes Association are presented.

LOUIS I. DUBLIN, DONALD B. ARMSTRONG and HERBERT H. MARKS, Metropolitan Life Insurance Company, New York:

Progress in Diabetes—The Statistical Picture: Charts illustrate the trends in mortality from diabetes with data on sex, age, regional and other variations in mortality and morbidity from the disease, new life tables for diabetics showing the progressive increase in expectation of life and comparisons with the general population, factors influencing the longevity of diabetic persons, trends in the causes of death of diabetic persons and comparisons with causes of death in the general population.

HOWARD F. ROOT, ELLIOTT P. JOSLIN, PRISCILLA WHITE, ALEXANDER MARBLE, ALLEN P. JOSLIN and CLIFFORD FRANSEEN, George F. Baker Clinic and New England Deaconess Hospital, Boston:

Diabetes Mellitus—Progress in Treatment: Charts and placards present follow-up data and causes of death in diabetes; results of treatment in pregnancy, coma and childhood diabetes are presented. Slides in color illustrate treatment of diabetic gangrene, especially the use of the transmetatarsal amputation.

ROBERT J. COFFEY and HOWARD S. MADIGAN, Georgetown University Medical Center, Washington, D. C.:

Gastrointestinal Obstruction in the Newborn and Infant: The exhibit is a graphic depiction of the various common and rare types of developmental defects in the gastrointestinal tract which occur in the newborn and infant. These babies, who otherwise would expire in a short period of time, are enabled to live and develop normally as a result of surgical correction.

JOHN H. TALBOTT, L. MAXWELL LOCKIE and BERNARD M. NORCROSS, Buffalo General Hospital, Buffalo, N. Y.:

Gouty Arthritis—Diagnosis and Treatment: The criteria for diagnosis of gouty arthritis are presented. Pertinent aspects of treatment are given together with some discoveries of the newer agents. Colored transparencies and roentgenograms will be projected on a screen.

AARON CHAVES and VERA LEITES, Bureau of Tuberculosis, New York:

Pulmonary Tuberculosis—Its Development in Persons Over 40 Years of Age: Pulmonary tuberculosis, formerly considered a disease of young people, has become of increasing importance in elderly persons. In New York City of 17,454 deaths from tuberculosis in the five year period 1942-1946, 10,496 (60 per cent) occurred in persons above 40 years of age. Two groups of cases are exhibited. Roentgenograms from the first group, patients over 40 years of age, show the development of pulmonary tuberculosis within a variable period after a normal roentgenogram of the chest had been obtained. The other group illustrates the frequently progressive course of minimal pulmonary tuberculosis in elderly persons. Increased attention of the family physician to the frequency and possible seriousness of pulmonary tuberculosis in elderly persons will lead to earlier diagnosis and treatment.

J. R. McDONALD, L. B. WOOLNER, C. A. GOOD and A. H. BULBULIAN, Mayo Clinic, Rochester, Minn.:

Tumors of the Lung—A Pathologic and Roentgenographic Study of Surgical Lesions: The exhibit is based on experience with tumors of the lung as seen in the surgical pathology laboratory. It includes data on bronchogenic carcinoma, bronchial adenoma, pulmonary adenomatosis and alveolar cell tumor, hamartoma of the lung and miscellaneous and metastatic pulmonary tumors. The gross, microscopic and roentgenographic appearances of these tumors as seen in a large series of cases are demonstrated. The histogenesis, site of origin and rate of growth and metastasizing capacity of each group of tumors are demonstrated. Also included is the clinical value of cytologic examination of sputum and bronchial secretions as an aid in the diagnosis of bronchogenic carcinoma.

A. H. FINKELSTEIN and LOUIS V. BLUM, University of Maryland School of Medicine, Baltimore:

First Infection of Tuberculosis: This exhibit illustrates various phases of first infection of tuberculosis. The presentation is planned to acquaint the general practitioner with the favorable and unfavorable features of various phases of childhood tuberculosis. Roentgenograms and case histories will be presented to demonstrate the roentgen and clinical findings. Roentgenograms of several infants with miliary tuberculosis treated with streptomycin, promizole® (4, 2'-diamino-diphenyl-5'-thiazolesulfone) and para-aminosalicylic acid are shown.

C. HARWELL DABBS, E. CONVERSE PEIRCE II, FREEMAN L. RAWSON JR. and JAMES L. SOUTHWORTH, United States Marine Hospital, Baltimore:

Venous Disorders of the Lower Extremities—Pathologicophysiology: By the use of charts, drawings, manometric tracings of venous pressures, photographs and phlebograms, the pathophysiologic aspects of primary and secondary varicose veins and chronic venous insufficiency is illustrated. By the use of an indwelling polythene catheter inserted in an ankle vein and use of a direct writing electromonometer a characteristic walking pattern for normal and chronic venous insufficiency is demonstrated. The defect is corroborated by phlebograms. In addition to presentation of collected data, it is proposed to demonstrate the technic of direct writing venous pressure in the ankle vein, using the electromonometer, on both normal persons and those with chronic venous insufficiency.

ESTERINO ELIA SANTEMMA, Hempstead, N. Y.:

Disorders of the Heart Beat—New Method of Teaching: In order to facilitate the teaching of the disorders of the heart beat, electrocardiographic tracings have been superimposed on a diagrammatic heart. Briefly, the method employs four plates, the first being the master plate, which demonstrates in one view the major disorders and where they originate. The remaining three plates present sample electrocardiographic tracings, again showing the point of origin, and grouped for easy visualization. The work represents the views as presented in current textbooks on electrocardiography; only those views that make for simplicity of understanding have been adopted.

HAROLD STEVENS, Georgetown University School of Medicine, Washington, D. C.:

Electroencephalography: The principles, applications, limitations and correlation of electroencephalographic records with clinical and pathologic data will be presented. Representative tracings, with brief explanatory notes, typifying the more important diseases will be exhibited. Charts, photographs and statistical tables will be included, together with the electroencephalographic findings in various convulsive disorders.

M. B. BAWELL, G. O. BROUN and G. E. THOMA, St. Louis University School of Medicine, St. Louis:

Viral Pneumonias: This exhibit demonstrates the similarities of the common types of viral pneumonias. Included are a typical case history, roentgenogram of the chest and the laboratory aids available in cases of psittacosis, primary atypical (virus) pneumonia and influenzal pneumonia. A kodachrome® photomicrograph of the pathologic changes of each type is shown. Also included for comparison is a case of "Q" fever and a case of pneumococcic lobar pneumonia. A schematic description of the various laboratory tests employed in virus infections is shown.

JACOB J. WEINSTEIN, C. R. HARTMAN, JOHN M. McCOY and MAURICE S. RAWLINGS, George Washington University School of Medicine and Hospital, Washington, D. C.:

Routine Anosigmoidoscopy and Anorectal Diseases: The technic of anosigmoidoscopy is described. The normal anatomy and its relationship to the anorectal diseases is included. Each of the common anorectal diseases is described by symptoms, gross picture and anoscopic appearance and treatment. The incidence of these lesions is included from a large series of patients seen in a medical clinic for complaints entirely unrelated to anorectal diseases. The relationship of these lesions to malignancy is shown. The use of a liquid analgesic agent for the local discomforts associated with anorectal diseases is presented. The theme of the exhibit is to teach every general practitioner the value of routine anosigmoidoscopic examination in the diagnosis and treatment of anorectal diseases.

T. H. SELDON, American Association of Blood Banks, Rochester, Minn.:

Banking America's Blood: The exhibit depicts the purposes and aims of the American Association of Blood Banks and describes the educational program and other services being offered to blood banks throughout the United States and elsewhere.

HART E. VAN RIPER, National Foundation for Infantile Paralysis, Inc., New York:

Treatment of Infantile Paralysis: Many unique devices especially designed for the orthopedically handicapped patient are demonstrated in an exhibit outlining the seven stages of treatment of infantile paralysis. Pictured are innovations such as arm and finger supports, eating utensils, remote control typewriters and leg braces. Based on the treatment methods employed at Georgia Warm Springs Foundation, the exhibit depicts the essential steps in the over-all care of the patient.

BUREAU OF MEDICINE AND SURGERY, Navy Department, Washington, D. C.:

Two Worlds—Or One: The exhibit highlights venereal disease, appraisal, planning and control, not as two distinct entities —two worlds, civilian and military, separately battling the same problem—but one world, in which military and civilian participation will lead to a control program of mutual responsibility with more effectiveness than has been possible in the past.

J. Q. GRIFFITH JR. and J. F. COUCH, U. S. Department of Agriculture, Philadelphia:

Medical Therapy in Relation to Retinal Hemorrhage: It is believed that retinal hemorrhage results from fault in the vascular wall, or abnormality in blood coagulation, or both. Fault in vascular wall is frequently demonstrated by increased capillary fragility (Gothlin test) or increased capillary perme-

ability (increased cutaneous lymphatic flow by the patent blue method). Both of these tests will be demonstrated so far as possible using subjects with recent retinal hemorrhage. Tests for blood coagulation at various stages will be demonstrated. Results of rutin therapy will be illustrated, and therapy with hesperidin, vitamin K, dicumarol,* vitamin E, protamine sulfate and diet will be considered.

RAYMOND W. CUNNINGHAM, A. C. DORNBUSH, B. M. DUGGAR and B. K. HARNED, Lederle Laboratories Division, American Cyanamid Company, Pearl River, N. Y.:

Studies on Aureomycin Hydrochloride: The exhibit consists of charts and posters showing the isolation of aureomycin, a new antibiotic, together with reports on pharmacologic, bacteriologic and other laboratory studies. The clinical uses and indications for the use of aureomycin are included.

FRANK L. MELENEY and BALBINA A. JOHNSON, Columbia University College of Physicians and Surgeons, New York:

Bacitracin Therapy in Surgical Infections: Charts show analysis of results in 270 patients treated systemically with bacitracin. The exhibit includes photographs, kodachrome* slides, temperature curves, blood and urine levels, antibacterial spectrum of bacitracin, synergism between penicillin and bacitracin "in vitro" and "in vivo," incidence in acute and chronic infections of strains of susceptible species of bacteria resistant to penicillin and bacitracin.

A. W. FREIREICH and J. W. LANDSBERG, Meadowbrook Hospital, Hempstead, N. Y.:

Amphetamine Sulfate Therapy of Acute Barbiturate Poisoning: Charts demonstrate the increased incidence of acute barbiturate poisoning. An outline of treatment of acute poisoning by the intravenous use of amphetamine sulfate is presented, with a summary of the results in 85 cases and representative charts of the blood pressure readings and pulse rates in 2 typical cases.

LESLIE N. GAY and PAUL E. CARLINER, Johns Hopkins University School of Medicine, Baltimore:

Motion Sickness: The exhibit deals with the prevention and treatment of sea sickness, air sickness and other forms of nausea.

RUDOLPH JAEGER and WILLIAM WHITELEY JR., Jefferson Medical College and Hospital, Philadelphia:

Intracranial Aneurysms: The exhibit shows the anatomy, symptoms, roentgenographic findings, pathology and surgical treatment of aneurysms of the intracranial carotid system.

FRANKLIN M. FOOTE, WILLIS S. KNIGHTON and VIRGINIA SMITH BOYCE, National Society for the Prevention of Blindness, New York:

Early Recognition of Glaucoma Saves Sight: The exhibit shows signs and symptoms of glaucoma which are easily recognizable during a general physical checkup. Suggested procedures for control of glaucoma by industrial and public health groups are charted. Demonstration of tonometry and testing visual fields is included.

ARTHUR A. MORRIS, Doctors Hospital and Georgetown University Hospital, Washington, D. C.:

Surgical Treatment of Psychomotor Epilepsy: This procedure is an original one, never before carried out. Severe psychomotor epilepsy has been operated on when medical therapy has failed, with good results and a high percentage of cures. The rational for this procedure is shown, together with demonstration of the need for help in the group and the number of patients that can return to normal work.

SPECIAL EXHIBIT COMMITTEE ON FRACTURES, AMERICAN MEDICAL ASSOCIATION:

KELLOGG SPEED, Chicago, Chairman.
GORDON M. MORRISON, Boston.
FREDERICK A. JOSTES, St. Louis.

The Washington representative of the Committee is Leonard T. Peterson. A series of practical demonstrations will be presented in three booths, covering the following subjects:

Compression Fracture of the Spine.

Fractures of the Radius—Lower End.

Fractures of the Ankle.

The purpose of the exhibit is to stress elementary points in treatment based on the pathology of each type of fracture for instruction of the physician in general practice.

A pamphlet, giving the essential points of the exhibit, has been prepared for distribution.

A large group of competent demonstrators will assist the committee in the presentation of the exhibit.

CHARLES F. BRANCH, American College of Surgeons, Chicago.

The American College of Surgeons and the General Practitioner: The exhibit consists of charts, posters and photographs focusing attention on the several activities of the American College of Surgeons and depicting how these various functions best serve the interests of the general practitioner as well as the specialty groups. These services attempt to elevate the level of the practice of medicine and thus the care of all patients through constantly improving all facilities and elements that go into such services.

J. ROSS VEAL, JOHN SHADID and THOMAS J. DUGAN, Georgetown University School of Medicine, Washington, D. C.:

Surgery of the Sympathetic Nervous System: The exhibit presents demonstration of the anatomy and physiology of the sympathetic nervous system, showing the clinical application to various vascular diseases. Indications and results of sympathetic surgery are included.

JOHN FALLON, JOHN J. MANNING, JAMES T. BROSNAN, JOHN MEYERS and WILLIAM G. MORAN, Fallon Clinic, Worcester, Mass.:

Endometriosis and the General Surgeon: Endometriosis is not a problem for the gynecologist alone. It is met fairly frequently in general surgery and general practice, and more women are seen with endometriosis than with appendicitis. Four hundred cases are analyzed to illustrate diagnostic pitfalls, including occurrence in youth; infrequently described lesions are exhibited, and a diagnostic syndrome is suggested: (*a*) cumulatively increasing period-linked pain, (*b*) in a mature woman without young children.

JOSEPH L. POSCH, City of Detroit Receiving Hospital and Wayne University College of Medicine, Detroit:

Care of the Injured Hand: The exhibit consists of a presentation of the importance of care of hand injuries and an outline of the early treatment. Tendon and nerve injuries, human bites, burns and amputations are briefly discussed. Illustrative cases are presented.

ALFRED J. SURACI, Georgetown University Medical Center, Washington, D. C.:

Maxillofacial and Reconstructive Surgery: The exhibit presents preoperative and postoperative photographs of congenital and acquired defects with methods of repair. Preoperative and postoperative models are included.

WILLIAM C. MELOY and GORDON S. LETTERMAN, George Washington University School of Medicine, Washington, D. C.:

Reconstructive Surgery: The exhibit shows repair of chronic ulcerations, the trophic ulcer problem in the paraplegia, repair of other large defects and general plastic surgical problems of interest to the general practitioner.

J. BROWN FARRIOR and R. A. BAGBY, Tampa Municipal Hospital, Tampa, Fla.:

The Fenestration Operation: The exhibit portrays the history, indications, technic and immediate and lasting results of the fenestration operation. The diagnosis of otosclerosis is outlined.

V 1
194

The selection of patients for the fenestration operation is described in audiogram and tuning fork tests. The technic is illustrated by anatomic drawings and a series of temporal bone dissections. The immediate and lasting results are illustrated by graphic charts.

FREDERICK A. BOTHE and RICHARD H. DRISCOLL, Presbyterian Hospital, Philadelphia:

Lesions of the Thyroid Gland: The exhibit shows the histologic picture in diffuse toxic gland, effect of iodine, thiouracil and propylthiouracil; types of chronic thyroiditis; adenomas; carcinoma, before and after irradiation; nontoxic goiter, and sarcoma.

OLIVER FIELD, Bureau of Investigation, American Medical Association, Chicago:

Mechanical Quackery: The exhibit deals with mechanical quackery, both historical and current, using the gadgets themselves and demonstrating such cure-alls as the "radioclast" and the Ghadiali "spectro-chrome."

J. HOWARD BEARD, United States Public Health Service, Washington, D. C.:

Opportunity in the United States Public Health Service: The exhibit presents some of the advantages of a career in the Public Health Service.

GEORGE COOLEY, Council on Medical Service, American Medical Association, Chicago:

Voluntary Health Insurance: The exhibit shows the percentage of persons enrolled in voluntary health insurance in each state, as well as special studies on the operations, growth and availability of voluntary health insurance.

MOTION PICTURES

Motion pictures will be shown in the Motion Picture Theater, Room 9, adjacent to the Scientific Exhibit. The following films will be shown daily throughout the week:

LEROY A. SCHALL, Massachusetts Eye and Ear Infirmary, Boston, in cooperation with the American Cancer Society:

Rehabilitation of Patients Who Have Undergone Laryngectomy: This motion picture demonstrates the principles of the methods used in teaching patients who have undergone laryngectomy the use of the esophageal voice. Animation is used to outline the surgical procedures involved and to illustrate the actual physical processes brought into play, in swallowing and expelling air to induce eructation. Sound, fifteen minutes.

H. J. HOLLOWAY and E. S. BURGE, Northwestern University Medical School, Chicago, and Evanston Hospital, Evanston, Ill.:

Manual Rotation in the Management of Occiput—Posterior and Occiput Transverse Positions: Motion picture presents a method of delivery by manual rotation and forceps extraction. The position, diagnosis and complete procedure are explained and clearly illustrated. Silent, thirty-two minutes.

EUGENE F. DUBOIS, Cornell University Medical College, New York; ROBERT ELMAN, Washington University, St. Louis, and HERBERT POLLACK, Mount Sinai Hospital, New York:

Malnutrition in the Hospital Patient: This film depicts the nutritional needs of hospital patients, especially surgical patients. Sound, thirty minutes.

H. J. SEDDON, Oxford University, London, England:

Diagnosis and Management in Poliomyelitis: The motion picture deals with a careful review of the diagnostic signs of early and more advanced poliomyelitis from the time of the earliest symptoms until the last stage of a well planned program of rehabilitation. It illustrates the incidence of poliomyelitis in Great Britain. Sound, fifty-seven minutes.

JOHN B. ROSS and O. BENWOOD HUNTER JR., Washington, D. C.:

Exchange Transfusion: In this motion picture an erythroblastotic infant is shown, with details of equipment and technic of transfusion for removal and replacement of blood. Silent, fifteen minutes.

AMERICAN CANCER SOCIETY, New York, and NATIONAL CANCER INSTITUTE, United States Public Health Service, Bethesda, Md.:

Diagnosis of Cancer of the Breast: Sound, thirty-five minutes.

H. E. NIEBURGS, EDGAR R. PUND, S. BAMFORD and HOKE WAMMOCK, University of Georgia, School of Medicine, Augusta, Ga.:

Diagnosis of Cancer by Exfoliative Cytology: The motion picture demonstrates: (1) the method of taking vaginal and endocervical smears; (2) normal cytologic changes during the menstrual cycle, pregnancy and the menopause; (3) diagnosis of preinvasive and invasive cancer of the cervix uteri, illustrating the morphology between these two types of cervical cancer; (4) diagnosis of endometrial cancer; (5) sources of error in the cytologic interpretation, and (6) diagnosis of cancer from other body fluids, such as sputum, bronchial aspiration, gastric lavage and prostatic fluid. Silent, thirty minutes.

JOHN C. JONES, Children's Hospital, Los Angeles:

Coarctation of the Aorta: This motion picture reviews the embryology, anatomy and physiology of coarctation of the aorta, outlines the clinical features and roentgen findings and illustrates the resection of a coarctation with end to end anastomosis. Sound, twenty-seven minutes.

LOYAL DAVIS, American College of Surgeons, Chicago:

Peripheral Nerve Injuries: Sound, thirty-one minutes.

VETERANS ADMINISTRATION, Department of Medicine and Surgery, Washington, D. C.:

Surgical Approach to the Shoulder Joints: A technical film on the fundamentals underlying the surgical approach to the shoulder joints. Sound, thirty minutes.

ARTHUR C. CORCORAN, DON CARLOS HINES and IRVINE H. PAGE, Lilly Laboratory for Clinical Research, Indianapolis:

Kidney Function in Disease: This motion picture is a sequel to the film "Kidney Function in Health." It begins with a discussion of the renal pressor system and then proceeds to show the changes in structure and function of the kidneys in hypertension, glomerulonephritis, pyelonephritis, renal calculus, crush syndrome and certain other conditions. The metabolism of water, electrolytes, acids and bases is discussed so far as it pertains to renal function. Sound, forty-six minutes.

ISOLATION HOSPITALS, LOS ANGELES, SAN FRANCISCO and OAKLAND, CALIF., through the cooperation of the local Public Health Departments:

Communicable Diseases: This motion picture illustrates the various aspects of common virus and bacterial diseases among children, although some cases among adults are shown. It presents the clinical manifestations, mode of transmission, incubation period, prodrome, syndrome, differential and direct diagnosis and course of each disease. Sound, thirty-five minutes.

CHARLES F. MCCUSKEY, Glendale, Calif.:

Endotracheal Anesthesia: This film presents a few of the basic requirements for endotracheal anesthesia. Specific apparatus for endotracheal intubation, including laryngoscopes, endotracheal tubes and cuffs, is demonstrated. Sound, twenty-five minutes.

AMERICAN MEDICAL ASSOCIATION, in cooperation with the COMMITTEE ON TECHNICAL ADVISERS of the UNITED STATES ARMY, UNITED STATES PUBLIC HEALTH SERVICE and the AMERICAN RED CROSS:

They Also Serve: This motion picture stresses the physician's responsibility in the event of a major disaster. It emphasizes the importance of organizing and supporting local emergency committees and points out the importance of thorough planning, so that physicians may be ready for any emergency. Sound, seventeen minutes.

the Technical Exposition

How can the family physician keep abreast of quickly advancing diagnostic and treatment technics? What are the *new* improvements in products needed in the combat against disease? How do these advances serve you and your patients?

At this third A. M. A. Clinical Session, the Technical Exhibits aid in answering these and other questions. Planned primarily to teach rather than to sell, they make available to the General Practitioner the equipment and services needed for diagnosis and treatment. The exhibits demonstrate brilliantly how drug manufacturers, medical publishers, and suppliers give the profession outstanding service, cooperation, and support. In each booth, qualified representatives present information on subjects of mutual interest.

The Exposition will open at 8: 30, Tuesday morning, December 6, and remain open each day until 6: 00 P. M. except on Friday, December 9. On this day the exhibits close at 12: 00 o'clock noon.

Following are brief notices to give you a general idea of what may be seen in the Technical Exhibits. Plan to visit them often.

THOS. R. GARDINER
Director of Technical Exhibits.

ABBOTT LABORATORIES
North Chicago, Ill.
Booth A-19

Tridione, a synthetic drug for the control of the petit mal triad, and Desoxyn, a cerebral stimulant and vasopressor agent, are featured in the Abbott Laboratories exhibit. Two illuminated pictures behind transparent mirrors illustrate the "before" and "after" story of Tridione therapy in petit mal. Four illuminated transparencies review the advantages of Desoxyn as to dosage, action and side-effects.

A. S. ALOE COMPANY
St. Louis, Mo.
Booths C-10, 12

Another one of our regular exhibitors is with us again this year. The A. S. Aloe Company with home offices in St. Louis has recently opened a branch at 1501 14th St., N.W., Washington, D. C., with the prime objective to better serve their many friends on the eastern seaboard. Their attractive display includes surgical, medical and laboratory supplies with particular emphasis on the latest developments in physical therapy equipment and surgical instruments.

AMERICAN HOSP. SUPPLY CORP.
Evanston, Ill.
Booth C-1

Many important items comprise this exhibit: the entire range of Baxter Parenteral Products, Solutions, Dispensing Sets, Blood Transfusion Equipment as well as Disposable Plastic Catheters; the full list of American Blood Testing Serums prepared by Dade County Blood Bank and Mt. Sinai Hospital, Chicago; the new Staticator for the detection and warning of perilous static electricity in operating rooms; the recently announced Cholelithophone, an electro-acoustic device for the location at operation of gallstones in the common and hepatic ducts; Aero-Kleno, a professional hospital deodorant that destroys prevailing hospital odors quickly and thoroughly; and a selected group of supplies and equipment designed to further the ends of better hospital service.

AMES COMPANY, INC.
Elkhart, Ind.
Booth A-20

Every doctor will be interested in the Selftester featured in the Ames booth. This is an inexpensive urine-sugar detection kit containing two Clinitest tablets. The Selftester is designed for public use and is approved by the American Diabetes Association as an aid to help detect the "million unknown diabetics" and to bring them under a physician's care.

APPLETON-CENTURY-CROFTS, INC.
New York, N. Y.
Booth A-16

Appleton-Century-Crofts has on display such important new titles as OPERATIVE TECHNIC IN GENERAL AND SPECIALTY SURGERY by 55 American surgeons; W. Wallace Morrison's EAR, NOSE AND THROAT; new revisions of John Kolmer's CLINICAL DIAGNOSIS; Wallace Yater's INTERNAL MEDICINE; Thomson & Negus' NOSE AND THROAT; Kelly & Hite's MICROBIOLOGY; Zinsser's BACTERIOLOGY and many other standard texts. Experienced attendants will gladly answer queries and supply detailed information.

THE GORDON ARMSTRONG CO., INC.
Cleveland, Ohio
Booth D-10

The Armstrong X-1 Baby Incubator shown here is well worth a special trip for inspection. Tested and approved by Underwriters' Laboratories and Canadian Standards Association, it also stands accepted by the Council on Physical Medicine and Rehabilitation of The American Medical Association. At the Washington Session no orders are being solicited; the incubator is in operation for demonstration and questions only.

ASSOCIATED MEDICAL CARE PLANS
Chicago, Illinois
Booth A-2, 4

Associated Medical Care Plans offer an educational and informative exhibit showing the contributions made by the physicians of the United States and Canada in developing and supporting the Blue Cross and Blue Shield Plans, together with a brief summary of the importance of these Plans in making prepaid health available to the public on a prepayment basis.

AVERST, McKENNA & HARRISON, LTD.
New York, N. Y.
Booth C-23

Enlightening information on "PREMARIN" (Estrogenic Substances-water-soluble) — a highly effective and well-tolerated preparation of naturally-occurring, orally-active conjugated estrogens (equine)—may be had in C-23. The potency of "Premarin" expressed in terms of its principal estrogen, sodium estrone sulfate, provides convenience of administration with flexibility of dosage. Four potencies of "Premarin" Tablets and the liquid form are presented.

W. A. BAUN CO., INC.
New York, N. Y.
Booth C-3

The big "news" here is the Baumanometer Alfi-LOK Cuff. The simplicity and unique effectiveness of this new blood-pressure cuff is attained by making the air pressure in the rubber bag do the work. No metal part of any kind is employed. The new PHLEBAUMANOMETER (Ibarch and Winsor)—for determining the blood-pressure in large and small veins—as well as all current models of the Lifetime BAUMANOMETER will also attract your attention.

BECK-LEE CORPORATION
Chicago, Ill.
Booth D-13

This exhibit features the Beck-Lee Quartz String Electrocardiograph with the Record Automatic Camera. This self-developing camera enables the physician to obtain a permanently developed true quartz string cardiogram as the patient is being tested. This remarkable camera performs, in about four seconds, the entire dark room developing and fixing process which normally takes fifteen minutes to a half-hour in the dark room.

BEECH-NUT PACKING COMPANY
Canajoharie, N. Y.
Booth C-6

Beech-Nut nutritionists in attendance at their booth will welcome your discussion of the Strained and Junior Foods. Their newest product, Beech-Nut Cereal Food, is also displayed. It is a scientifically prepared blend of enriched farina, oatmeal, defatted wheat germ, cornmeal, defatted corn germ, powdered beef bone, dried Brewer's yeast, salt and sodium iron pyrophosphate.

THE BEST FOODS, INC.
New York, N. Y.
Booth D-17

The Best Foods, Inc., is exhibiting Nucoa, the wholesome, nutritious, vegetable margarine, which contains 15,000 units of vitamin A to the pound. Ask to taste Hellmann's Real Mayonnaise and other famous Best Foods' products. You have a treat in store for you. Miss Elsie Stark, Director of Consumer Education, in charge of the booth, will welcome questions about the products.

THE BLAKISTON COMPANY
Philadelphia, Pa.
Booth F-4

See BLAKISTON'S NEW GOULD MEDICAL DICTIONARY. This modern, up-to-date, dictionary contains more new words than any other medical dictionary, 252 illustrations (129 in color) and a complete anatomical atlas—the first completely new unabridged medical dictionary in 38 years. Easier to use, more complete, more accurate, BLAKISTON'S NEW GOULD is the keystone for a full line of texts and reference books. Blakiston representatives will be happy to help you find the book you desire.

JOHN H. BRECK, INC.
Springfield, Mass.
Booth B-12

The Breck exhibit is announcing a new Baby Breck Kit, containing Baby Breck Ointment for use in eliminating and preventing diaper rash; Baby Breck Soap, a mild pure cake soap; and Baby Breck Lave, a gentle liquid cleanser for bathing baby from head to toe. A plastic dispensing bottle is included.

BREWER & COMPANY
Worcester, Mass.
Booth F-12

Your call will be welcomed at the Brewer display where known products of its Ampul Division as well as the Tablet Division and two of its specialties—GEL-ETS OLEOVITAMIN A 25,000 UNITS AND GEL-ETS TRIASYN B—are on display. Representatives will be glad to answer any questions concerning these products and arrange for samples and literature to be sent to the physician's office.

BROCKMAN MFG. CO.
Bala-Cynwyd, Pa.
Booth F-17

Medically prescribed passive, active assistive, active, or progressive resistive exercises are obtainable with the Brockman Therapeutic Exerciser. It is designed specifically for professional use in physical medicine and rehabilitation. This electronically controlled exerciser offers a selection of exercises to various muscle groups with calibrated control of resistance, speed and range of motion.

BURNS CUBOID COMPANY
Santa Ana, Calif.
Booth C-11

Recognizing the doctor's increasing interest in foot comfort, Burns Cuboid Company are showing a large, lighted, Masonite display completely refinished and designed to emphasize the ideas of weight distribution and balance. A gratifying factor to the firm is the return of about 50% of doctors who purchased Cuboids at previous sessions, either for additional Cuboids or to point them out to other physicians. During A.M.A. sessions a courtesy discount is extended physicians, their wives, and nurses.

BURROUGHS WELLCOME & CO. (U.S.A.) INC.
Tuckahoe, N. Y.
Booth C-24

Among significant products featured here are "Wellcome" brand GLOBIN INSULIN with Zinc "B. W. & Co."—an accepted intermediate acting insulin; "DEXIN" brand High Dextrin Carbohydrate, in which the non-fermentable proportion predominates; and DIGOXIN—a pure, stable, crystalline glycoside which offers predictable digitalization.

CAMEL CIGARETTES
New York, N. Y.
Booth A-1

CAMEL Cigarettes feature color slides of background data from their newest research. After weekly examinations of the throats of hundreds of men and women smoking CAMEL Cigarettes exclusively for thirty days, throat specialists reported "Not one single case of throat irritation due to smoking CAMELS."

CAMERON SURGICAL SPECIALTY CO.
Chicago, Ill.
Booth D-24

Among the interesting items demonstrated at the Cameron exhibit are the new Suction Coagulation Handle and numerous accessories for all phases of Electro-Surgery, Electro-Cauterization, Electro-Coagulation, Desiccation and Fulguration; Cameron Surgical Units; Electro-Diagnostic Lamp and Instrument Outfits; the new stainless steel Boros Flexible Esophagoscope and other Personal Equipment; Coagulair and Dualite Sigmoidoscopes; Tele-Vaginalite; Mirrorlite and other Headlites; Binocular Loupes; Illuminated Specula, Endoscopes and Retractors.

CARNATION COMPANY
Los Angeles, Calif.
Booth C-19

You will see an attractive display on Carnation Evaporated Milk — "the milk every doctor knows." Some valuable information on the use of this milk for infant feeding, child feeding, and general diet is presented and the method by which Carnation is generously fortified with pure crystalline Vitamin D—400 U.S.P. units per reconstituted quart—is explained. Interesting literature is also available for distribution.

THE CENTRAL PHARMACAL CO.
Seymour, Ind.
Booth B-13

Newest product advancements in triple-sulfa therapy keynote the central display. Their Trisulfazine line — which provides greater safety and increased effectiveness in the treatment of a wide range of serious infections—merits your attention, as does their Synophylate or Theophyllin-Sodium Glycinate group of products, representing improvements in the field of Theophyllin therapy. A valuable souvenir commemorating the Clinical Session and honoring the A.M.A. is available to all physicians.

THE CHICAGO DIETETIC SUPPLY HOUSE
Chicago, Ill.
Booth E-21

Management of Special Dietaries may be easier if you become acquainted with the line of Cellu Dietary Foods on exhibit here. These foods are purposefully prepared for inclusion in Low Sodium, Allergy, and Sugar and Starch restricted diets. Cellu Products have served the medical field for 28 years and are constantly being adapted to the changing demands of Dietary Control. Some brand new foods are being featured.

CHILCOTT LABORATORIES
Morris Plains, N. J.
Booth B-4

Simple, reliable prothrombin determination made possible with Thromboplastin-Chilcott is being demonstrated at Booth B-4 of Chilcott Laboratories, Division of The Maltine Company. Advantages of the more stable tablet form of Thromboplastin-Chilcott may be observed in the approved Quick (whole plasma) and Link-Shapiro (whole and dilute plasma) tests. Literature and laboratory instructions are available at the booth.

CHURCH & DWIGHT CO., INC.
New York, N. Y.
Booth C-14

The use of Arm & Hammer and Cow Brand Baking Soda as a dentifrice is emphasized in the Church & Dwight exhibit. Colorful little booklets suggesting its application in cleaning teeth are on display and handy pocket-sized samples especially suitable for traveling may be had at the booth.

CIBA PHARMACEUTICAL PRODUCTS, INC.
Summit, N. J.
Booth D-9

The Ciba exhibit features PYRIBENZAMINE, an established antihistaminic for allergic relief with minimal side effects. Experienced professional service representatives in attendance will gladly discuss Pyribenzamine tablets, elixir, cream, and ointment—the Council accepted forms of Pyribenzamine.

THE COCA-COLA COMPANY
Atlanta, Ga.
Booths D-25, E-26

Once again you are invited to pause at the Coca-Cola exhibit and enjoy a refreshing ice cold Coca-Cola—served to Convention visitors through the courtesy and cooperation of Washington Coca-Cola Bottling Works, Inc. and the Coca-Cola Company.

WARREN E. COLLINS, INC.
Boston, Mass.
Booth A-12

In booth A-12 Warren E. Collins, Inc. display the latest model Drinker-Collins Respirator equipped with the new Minnesota sloping front; the Collins Respirometer used in the detection and treatment of respiratory function; the Collins Vitalometer; Collins Metabolex, the waterless metabolism tester; and the Collins Oxyflo Open Top Oxygen Tent. Drop in for a demonstration.

COLWELL PUBLISHING COMPANY
Champaign, Ill.
Booth E-18

Complete medical records, attractively designed and logically arranged—that's the keynote of the Colwell line. Patients' histories and accounts are easy to keep; the DAILY LOG for Physicians provides the basis for keeping track of the business side of a practice. You will want to examine the Daily Log and case history forms and discuss your needs with experienced representatives.

COOPERATIVE MEDICAL ADVERTISING BUREAU
Chicago, Ill.
Booth F-27

Copies of the 34 state medical publications comprising the State Journal Group, are on display. These member Journals of the C.M.A.B., representing 42 state medical associations, follow the A.M.A. high standards in acceptance of advertising. Prospective advertisers are invited to secure sample copies, rates and other information at the booths. Also available are "Advertising Service," a booklet outlining services performed by the Bureau for both advertisers and advertising agencies, and the Budget, offering 29 space plans for coverage in the entire group of publications.

DAVOL RUBBER CO.
Providence, R. I.
Booth C-17

The Davol exhibit embodies the latest developments in Surgical Rubber Specialties: a Colostomy Irrigator; a new Ileostomy Appliance; the recently introduced "Hanna" Style Colostomy; an all rubber Bed Pan; and a rubber Water-cooled Mattress. Of common interest will be a presentation of Davol's improved "Anti-Colic" Nurser with Control Vent, "Anti-Colic" Nipples and standard hospital and surgical needs.

THE DENVER CHEMICAL MFG. CO., INC.
New York, N. Y.
Booth E-5

Galatest for the instantaneous determination of urine sugar and Acetone Test (Denco) for the detection of acetone in urine are being exhibited. You are cordially invited to witness a demonstration of these "spot tests" for sugar and acetone which offer advantages of accuracy, simplicity, and economy in routine urinalysis.

DEPUY MFG. CO.
Warsaw, Ind.
Booth C-13

Latest designs in Fracture Appliances highlight the De Puy exhibit. Sherman bone plates, Smith-Petersen nails, Lorenzo Half-Thread hip screws, and other items for internal fixation of bones—all made of S.M.O. Stainless Steel—also merit your attention. These plates and screws can be furnished in electro-polish.

DUREX PRODUCTS, INC.
New York, N. Y.
Booth B-2

A most extensive line of Council-Accepted contraceptive devices and preparations are on display for your examination and approval by Durex Products, Inc. Here you may inspect Bow-Bend, Dumas, Duraflex, Mensinga and Durex Coil Spring Diaphragms, four types of diaphragm inserters and, of course, Lactikol Jelly and Lactikol Creme. Unique combination sets for convenient dispensing are being demonstrated.

E & J MFG. CO.
Glendale, Calif.
Booth D-14

Visitors may witness interesting demonstrations of the E & J Automatic Resuscitator and inspect the new E & J Gas Anesthesia Machines. Entirely new methods of design and construction are featured in both units. The clinical doll that breathes is an interesting part of the exhibit.

EATON LABORATORIES, INC.
Norwich, N. Y.
Booth B-3

Representatives at the Eaton exhibit will appreciate the opportunity of discussing with you: the new dosage forms available and latest clinical developments in FURACIN therapy; Tripazine—the Eaton triple sulfonamide tablet, containing no sulfothiazole, designed to minimize crystalluria; and two recent clinical studies of Lorophyn Suppositories which indicate the effectiveness of this simple technic.

EDIN ELECTRONICS CO.
Worcester, Mass.
Booth B-8

A complete line of Electrocardiographs, Electroencephalographs, Cardiotachometers, Recorders, Amplifiers, and Ink-recording Oscillographs are on exhibit by the Edin Electronics Company. Many new phases of medical installation are being demonstrated including the new ANGIOELECTROCARDIOGRAPH with adjustable delay used for tripping x-ray or other recording apparatus when the heart assumes a certain phase position. The ANGIOCARDIOGRAPH was developed in conjunction with the Westinghouse Electric Company, X-Ray Division and several leading research cardiologists.

ELECTRO-PHYSICAL LABS., INC.
New York, N. Y.
Booth E-3 (W½)

Two important items are on exhibit at the Electro-Physical Laboratories' booth: The model PC-2 CARDIOTRON, pioneer direct-writing Electrocardiograph; and the Cardioscan, by new application of electronics, resulting in a visual sampling cathode-ray electrocardioscope.

ELECTRONIC SURGICAL EQUIPMENT CO., INC.
Philadelphia, Pa.
Booth B-16

Exhibited here is the RADIOSURG SCALPEL Operating Unit (fully rectified construction), a portable radio frequency surgical apparatus of advanced engineering design. This precision instrument permits the use of varied electronic surgical methods to meet the minor surgical needs of the general physician, proctologist, gynecologist, or surgeon. Constructed according to exacting specifications, it supplies ideal current characteristics.

FABRIKATORS, INC.
Boston, Mass.
Booth E-6

For complete information on this firm's "CHESTPIRATOR" Hospital Model Portable Respirator visit booth E-6. Meet the representatives who can answer questions about this important product. The unit has a great many features of the large rigid type respirators.

FANCEE FREE MFG. CO.
St. Louis, Mo.
Booth D-10

Your "expectant mother" patients will be happy to know about the comfortable elastic garter belt for use during and after pregnancy. Fitting around the waist in back and below the abdomen in front, the FANCEE FREE thus eliminates any abdominal pressure. It is available in small, medium, and large sizes or in an adjustable style that fits any of these sizes. Be sure to see it.

GASTRO-PHOTOR LABS. CORP.
New York, N. Y.
Booth E-6 (W½)

Gastroenterologists, surgeons, general practitioners are especially invited to visit booth E-6 where a camera for photographing the interior of the stomach is properly displayed and demonstrated. This camera has received favorable comments from eminent physicians, Army and Navy Departments, and a number of European and South American countries. The instrument makes possible the diagnosing of ulcers hidden within rugal folds or in locations inaccessible to x-ray observations. Free sample photographs are available.

GRADWOHL LABORATORIES
St. Louis, Mo.
Booth B-23

To give the medical profession an idea of their activities, Gradwohl Laboratories are featuring: their production of reliable laboratory reagents; training of laboratory and x-ray technicians; publication of a monthly journal, the "Laboratory Digest," and of a textbook (in three volumes now in the fourth edition), "Clinical Laboratory Methods and Diagnosis." Trained attendants will answer all questions relating to these activities and send literature to all who register at the booth.

THE GRAPETTE COMPANY, INC.
Camden, Ark.
Booth F-13

Exhibiting for the first time at an A.M.A. meeting, the Grapette Company, Inc., confines its activities to serving its chief product—GRAPETTE. Representatives will welcome your visit.

GRAY MFG. CO.
Hartford, Conn.
Booth F-25

Audograph Sales Company, in booth F-25, is demonstrating the amazing ease with which case histories may be recorded and transcribed, as well as exclusive features of the Gray Audograph electronic soundwriter. The compactness of the filing space requirements for Audograph paper-thin record discs is illustrated by a housing of 100 discs in a one-inch file space as against the space occupied by the comparable 2000 typewritten pages.

GRUNE & STRATTON, INC.
New York, N. Y.
Booth D-23

Notable among the many G & S books shown at the exhibit are the following 1949 publications: PROGRESS IN CLINICAL ENDOCRINOLOGY, edited by Samuel Soskin with ninety-two contributors; CARDIOVASCULAR DISEASE, by Louis H. Sigler; REGIONAL ILEITIS, by Burrill B. Crohn; ANGINA PECTORIS AND MYOCARDIAL INFARCTION, by Heyman B. Miller; ACUTE LARYNGOTRACHEOBRONCHITIS, by A. Harry Neilson; New Second Edition of ELEMENTS OF MEDICAL MYCOLOGY, by Jacob Hyams Swartz; New Second Edition of MONGOLISM AND CRETINISM, by Clemens E. Benda; SYNOPSIS OF HERNIA, by Alfred H. Iason; EARLY CARCINOMA OF THE UTERINE CERVIX, by Hansjakob Wespi.

HANOVIA CHEMICAL & MFG. CO.
Newark, N. J.
Booth D-20

A complete line of ultraviolet quartz lamps for artificial and general body irradiation is on display as well as Hanovia Sollux Radiant Heat Lamps, jacketed type ultraviolet Germicidal Lamps for the destruction of air-borne bacteria, and black light for diagnostic determinations. Competent and courteous representatives are on hand to greet you and will welcome your visit.

V 1
194

THE HARROWER LABORATORY, INC.
Glendale, Calif.
Booth C-4

Mucotin, the mucin antacid, is presented at the Harrower technical exhibit. Gastroscopic illustrations show the coating action of Mucotin on a large gastric ulcer. A case history report of a patient with a gastric ulcer and the response to treatment is demonstrated with gastroscopic pictures. Gastric acidity control studies with various antacids are graphically presented. Literature and samples are available at the exhibit.

H. J. HEINZ CO.
Pittsburgh, Pa.
Booth C-18

H. J. Heinz Company display Strained and Junior Foods as well as a wide variety of nutritious material. Doctors will find the products of interest not only for feeding infants and other small children, but also in gastro-intestinal cases, preoperative and postoperative disturbances, oral troubles, geriatrics, and a number of conditions where Strained and Junior Foods are required.

HOLLAND-RANTOS COMPANY, INC.
New York, N. Y.
Booth E-11

So that patients may determine individual preference, tubes of both Koromex Jelly and the less-lubricating Koromex Cream are provided at no extra cost in the KOROMEX DIAPHRAGM COMBINATION featured in the Holland-Rantos exhibit of Koromex Contraceptive Specialties. On display also is the KOROMEX REFILLABLE UNIT. No added charge is made for the attractive ivory-colored plastic box that affords a dustproof protective container for the Koromex Diaphragm, measured-dose applicator and two tubes of Koromex Jelly (or Koromex Cream as desired).

HYGEIA, THE HEALTH MAGAZINE
Chicago, Ill.
Booth F-20

Ask the booth attendant here to mail one or more free copies of HYGEIA to your home or office reception room. See the pictorial representation of a modern magazine's editorial contributors, processes of editing, methods used for accepting advertising, division of readership groups, etc. Featured are sequence-lighted color transparent photographs showing how HYGEIA "speaks" to parents, their families, and members of various professions.

IMPORTED SPECIALTIES, INC.
New York, N. Y.
Booth F-7

The new imported Buhl Pocket-Size Spirometer, which weighs less than one pound and fits into a doctor's kit, is being shown by Imported Specialties, Inc. Used by many hospitals, doctors, and universities because of its handiness and simplicity to operate, it is truly a revolutionary improvement over old type Spirometers.

INTERNATIONAL COLLEGE OF SURGEONS
Chicago, Ill.
Booth F-10

The exhibit of the United States Chapter, International College of Surgeons, presents graphically detailed information concerning the activities of the organization in all its phases, the principles upon which it was founded and functions, the location of its component chapters throughout the world, its general and educational program, and the extent of its activities.

IODINE EDUCATIONAL BUREAU, INC.
New York, N. Y.
Booth D-10

The Iodine Educational Bureau exhibit calls attention to the place of iodine in surgery, medicine and nutrition. Samples of U. S. P. and N. F. preparations and Council-Accepted preparations containing iodine are displayed. Representatives are on hand to offer the Bureau's services without cost or obligation.

HOWARD JOHNSON ELECTROSTATICS & ELECTRONICS INC.
Pound, Va.
Booth E-12

Of particular interest is the ELECTROMAGNETIC HYPODERMIC—and electrically-operated syringe which promises painless injections! The device also features a heating coil for sterilizing the solid needle between injections and disposable contact knobs which make sterilization between injections unnecessary. Be sure to see it demonstrated at the booth.

JONES METABOLISM EQUIPMENT CO.
Chicago, Ill.
Booth A-3

The Jones Metabolism exhibit offers a splendid opportunity to become better acquainted with the various Jones Metabolism units, both standard and DeLuxe models. A staff of trained technical advisers demonstrate the equipment and explain any problems concerned with metabolism testing.

KELLOGG COMPANY
Battle Creek, Mich.
Booth D-21

Visitors to the Clinical Session who are interested in diet will want to see the set of special diet pads covering Bland, High Residue, Low Caloric, High Caloric, Salt Restricted, and Low Fat diets on display at the Kellogg booth. A Diet Manual giving suggestions for additional restricted diets is also available. These diets have been carefully outlined following the recommendations of best known authorities on diet in disease.

LANTEEN MEDICAL LABORATORIES, INC.
Evanston, Ill.
Booth C-22

Physicians interested in AN IMPROVED METHOD OF CONTRACEPTION are invited to visit the Lanteen exhibit. This authoritative brochure features an improvement in the Diaphragm and Jelly method of contraception—regarded by leading authorities as the safest and most effective means of preventing conception. The brochure will be distributed to physicians by Lanteen representatives who will be on hand to explain all phases of the Lanteen Contraceptive Procedure.

LEA & FEBIGER
Philadelphia, Pa.
Booth A-11

The Lea & Febiger exhibit will be of particular interest because of its display of such outstanding new books and new editions as Palmer, STOMACH DISEASE AS DIAGNOSED BY GASTROSCOPY; Pratt, SURGICAL MANAGEMENT OF VASCULAR DISEASES; Singer, DIFFERENTIAL DIAGNOSIS OF CHEST DISEASES; Hartman and Brownell, THE ADRENAL GLAND; Quiring, COLLATERAL CIRCULATION; Comroe, ARTHRITIS AND ALLIED CONDITIONS; Bridges, DIETETICS FOR THE CLINICIAN; Lichtman, DISEASES OF THE LIVER, GALLBLADDER AND BILE DUCTS; Kovacs, ELECTROTHERAPY AND LIGHT THERAPY; Goldberger, UNIPOLAR LEAD ELECTROCARDIOGRAPHY; Burch and Winsor, PRIMER OF ELECTROCARDIOGRAPHY; Pohle, CLINICAL ROENTGEN THERAPY; and many others.

LEDERLE LABORATORIES DIVISION
New York, N. Y.
Booth A-15

Studies on Aureomycin are portrayed at the Lederle exhibit. Of special interest is a presentation of charts and posters showing the isolation of Aureomycin—a versatile antibiotic—together with reports on the pharmacology, bacteriologic studies and other laboratory studies. Photographs showing the nature of the antibiotic as well as charts of clinical case reports are included.

THE LIEBEL-FLARSHEIM CO.
Cincinnati, Ohio
Booth E-7

Latest diathermy and Bovie electrosurgical apparatus are available for your examination and demonstration at the Liebel-Flarsheim booth. This year's exhibit features the "Office Bovie," an electrosurgical unit specially designed for office use. Capable representatives are on hand at all times and hope you will stop by to become acquainted.

ELI LILLY AND COMPANY
Indianapolis, Ind.
Booths D-8, 11

Your Lilly medical service representative cordially invites you to visit the exhibit of Eli Lilly and Company. The display features a demonstration of the rapid slide flocculation test for the sero-diagnosis of syphilis with Cardiolipin. Tests made with Cardiolipin have been found to be more easily performed than earlier ones, and their sensitivity is as good or better than others using a lipoid antigen. False positive reactions, although not completely avoided by the Cardiolipin test, are materially reduced, especially in malaria.

J. B. LIPPINCOTT COMPANY
Philadelphia, Pa.
Booth C-2

Look to Lippincott for timely, practical, and authoritative information to selected professional books in all fields of medicine, surgery, nursing, and pharmacy. Here is a continual indication of current medical trends and needs which serves as the basis for new and revised clinical volumes and textbooks. Here are reports of the outstanding and significant work being done in general practice as well as the specialties by men making very real contributions to medical progress.

THE LOFSTRAND COMPANY
Rockville, Md.
Booth E-13

The Lofstrand Company presents the latest research development in prefabricated leg brace parts. These parts are quickly and easily assembled into various types of lightweight aluminum leg braces. Other features include: proper physiological fit by employing multi-pivot knee locks, interchangeable stirrups, excellent wearability, and beautiful permanent aluminite finish. The newly expanded line of Lofstrand Featherweight Crutches are also presented.

P. LORILLARD CO., INC.
New York, N. Y.
Booth F-15

The exhibit by the makers of Old Gold Cigarettes is symbolic of the company's manufacturing policy which has been to retain all that is best in traditional methods and combine these with the best that Twentieth Century science affords. The booth is manufactured of the newest of plastics, plywood, and illuminated with indirect fluorescent light. The central feature is a lighted map showing the extent of Lorillard's manufacturing and sales facilities.

LUZIER'S, INC.
Kansas City, Mo.
Booth D-21

This complete display of Luzier's Fine Cosmetics and Perfumes will be of special interest to dermatologists and allergists as well as to the ladies who visit the Clinical Session. Officials of Luzier's, Inc. will be on hand to explain Luzier's Service in the Field of Allergy.

M & R DIETETIC LABS., INC.
Columbus, Ohio
Booths D-5, 7

Similac Division, M & R Dietetic Laboratories, Inc. will present an interesting display of Similac, a food for infants. Representatives look forward to your visit and the opportunity to discuss the merits and suggested application of Similac for both the normal and special feeding case.

THE S. E. MASSENGILL CO.
Bristol, Tenn.
Booth C-16

The S. E. Massengill Company calls attention to its showing of the clinical advantages of dual and triple sulfonamide combinations. Emphasizing reduced renal hazard due to lessened crystalluria, decreased incidence of allergic manifestations, and greater therapeutic efficacy due to lessened acetylation, the exhibit offers excellent opportunity for discussion of sulfonamide therapy. Medical Service Representatives of the Company will be pleased to register you.

F. MATTERN MFG. CO.
Chicago, Ill.
Booth D-4

New designs, new developments, and new possibilities for better professional service through their improved x-ray equipment are the points of interest in the Mattern exhibit. One of the units on display is the much talked of PUSH BUTTON CONTROL

100MA UNIT which, say the manufacturers, leads the x-ray field not only in style and quality, but also in being reasonably priced. Courteous, experienced personnel are at your service to answer any questions.

MEAD JOHNSON & COMPANY
Evansville, Ind.
Booth A-7

Dextri-Maltose, Oleum Percomorphum, Pablum, Pabena, Olac and other Mead Products used in Infant Nutrition will merit your thoughtful attention at the Mead Johnson exhibit. Protenum, a new high protein product, is also displayed as well as Lonalac, for low sodium diets. Representatives at the exhibit will be glad to discuss with you the new improvements of Amigen and Amisets.

THE MEDICAL BUREAU
Chicago, Ill.
Booth A-5

In Booth A-5, Burneice Larson offers the facilities of The Medical Bureau, an organization serving as counselor in problems of medical personnel to medical schools and universities, public health organizations, hospitals and institutions, group clinics, physicians in private practice and industry. The records of Diplomates of the American Boards qualified to head their departments, younger physicians interested in obtaining training also, administrators, executive and supervising nurses, scientists, laboratory technicians, x-ray technicians, social workers, and dietitians are available to those interested in the completion or reorganization of their staffs.

MEDICAL CASE HISTORY BUREAU
New York, N. Y.
Booth E-2

A handy, compact method for keeping complete case histories is being shown by the INFO-DEX RECORD SYSTEM. These history charts are so arranged on folders that subsequent cards are attached by means of a cotter pin which holds the cards together in correct sequence. No cards can be lost or detached. Different colored cards are available for various types of data such as laboratory, x-ray findings, etc. Included in this system is an automatic diagnostic cross-indexing. All cases of the same disease can be identified instantly. Very fine steel filing cabinets in which to house these history charts and bookkeeping records are also shown for your convenience.

MEDICAL FILM GUILD, LTD.
New York, N. Y.
Booth A-22

"Medical Films That Teach" presents a refresher course in fundamental medical problems. Each film subject is produced in the manner of a textbook, profusely illustrated, offering information comparable to that found in postgraduate courses as presented at our leading medical schools. These films are available at no charge to intern groups, hospital staff conferences, limited nurses' groups, and to general medical meetings. This includes projection service at no charge and is arranged through grants for postgraduate instruction.

THE MENGEL COMPANY
Louisville, Ky.
Booth C-5

The Mengel Adjustabed, made by the manufacturers of Mengel Permanized Furniture, offers patients many of the advantages of a hospital bed—at low cost. Made of sturdy plywood, and placed between mattress and springs, the new Mengel Adjustabed permits anyone to rest in relaxing positions that can be conveniently altered.

MERCK & CO., INC.
Rahway, N. J.
Booth D-15

Cobione (Crystalline Vitamin B-12 Merck), Streptomycin Calcium Chloride Complex, and Dihydrostreptomycin are the main features at the Merck booth. Representatives will be glad to supply information and literature on these and other Merck products.

WM. S. MERRELL CO.
Cincinnati, Ohio
Booth F-18

Merrell features Diothane Ointment, an improved topical anesthetic of prolonged effectiveness and established clinical safety —together with its companion product, Diothane Cream, designed for use where a vanishing cream base is preferable. Decapryn, a low-milligram-dosage antihistaminic, is also displayed. Merrell representatives will welcome your inquiries.

C. V. MOSBY COMPANY
St. Louis, Mo.
Booth A-17

Here you will find a wealth of new and interesting material. A few of the recent releases include Slocum, AMPUTATIONS; Merrill-Picker, ATLAS OF ROENTGENOGRAPHIC POSITION; Regan, DOCTOR AND PATIENT AND THE LAW; Sachs, BRAIN TUMORS AND THE CARE OF NEUROSURGICAL PATIENTS; Titus, ATLAS OF OBSTETRIC TECHNIC; Bertwistle, ATLAS OF RADIOGRAPHS; and Kantor-Kasich, HANDBOOK OF DIGESTIVE DISEASES—plus many others.

NATIONAL DAIRY COUNCIL
Chicago, Ill.
Booth D-18

"INFANT FEEDING," the exhibit prepared by the National Diary Council, dramatizes the information given in their new leaflet, "HOW TO PREPARE YOUR BABY'S FORMULA." This leaflet, planned for use with the doctor's prescription, is a convenient aid in giving mothers easy-to-follow directions. A portfolio including the leaflet and other materials of particular interest to doctors will be available at the exhibit.

NEPERA CHEMICAL CO., INC.
Yonkers, N. Y.
Booth E-19

The display features illuminated color illustrations showing the pathology of infections of the bladder and kidney. Mandelamine (brand of methenamine mandelate) is the product on display. Indicated in urinary infections, Mandelamine is effective in a wide antibacterial range, especially well tolerated, and easily administered.

ORGANON INC.
Orange, N. J.
Booth A-6

Heparin—the body's natural anticoagulant—is the subject about which the Organon exhibit is centered. Subcutaneous injection and other new methods of administering Liquamin—the Organon brand of heparin—are described. Newer concepts of the mechanism of blood coagulation, showing sites of heparin action are illustrated together with a machine actually demonstrating the anticoagulant action of heparin on the blood. Docs Acetate (desoxycorticosterone acetate), another Council-Accepted Organon product, is also featured.

PARKE, DAVIS & CO.
Detroit, Mich.
Booths E-1, F-2

Members of the Parke, Davis & Company Medical Service Staff are in attendance at the exhibit for consultation and general discussion covering a group of Council-Accepted Parke-Davis Products. Featured particularly are CHLOROMYCETIN and OXYCEL. You are cordially invited to visit the exhibit with the assurance that your inquiries and expressions of interest will be given appropriate attention.

THE E. L. PATCH COMPANY
Boston, Mass.
Booths B-17, B-19

A very interesting demonstration here dramatizes the quick disintegration and rapid anti-acid action of Alzinox, the Patch brand of Dihydroxy Aluminum Aminoacetate. This combination of the amino acid glycine with aluminum is of special value in hyperacidity and peptic ulcer because it provides both rapid and prolonged action without acid rebound. You may also learn more about Glytheonate, the Patch brand of Theophylline Sodium Glycinate, which has been found to permit high dosage levels of theophylline with minimum gastric irritation. Patch representatives will welcome you and tell you about these new products which in addition to Kondremul constitute the Patch Exhibit.

PET MILK COMPANY
St. Louis, Mo.
Booth C-9

A miniature working model of an evaporated milk plant is exhibited by the Pet Milk Company. This exhibit offers an opportunity to obtain information about the production of Pet Milk, its use in infant feeding, and the time-saving Pet Milk services available to physicians. Miniature Pet Milk cans are given to physicians who visit the Pet Milk Booth.

PETRA MFG. CO.
Chicago, Ill.
Booth B-14

In addition to the regular complete line of professional garments and covers, Petra Manufacturing Company, manufacturers of Kresten garments, are this year showing the new "doctor's Booteen," of special interest to orthopedic specialists and urologists. These bootees slip right over regular shoes, protecting both shoes and trouser legs completely from fluids, plaster of paris, or any dirt that might otherwise ruin clothing. Fluoroscopic screen covers in two sizes are also a new, featured item.

PHILIP MORRIS & COMPANY
New York City, N. Y.
Booths A-21, B-9

Philip Morris & Company demonstrate the method by which it was found that Philip Morris Cigarettes, in which diethylene glycol is used as the hygroscopic agent, are less irritating than other cigarettes. Their representative will be happy to discuss researches on this subject and problems on the physiological effects of smoking.

W. F. PRIOR CO.
Hagerstown, Md.
Booth E-25

W. F. Prior Company show the latest revisions of their loose-leaf reference books, Vier's *Medicine*, Lewis-Walters *Surgery*, Brennemann-McQuarrie *Pediatrics*, and Davis' *Gynecology and Obstetrics*. Many collected abstracts on current and interesting subjects will also be available for your examination. Members of the Prior Threefold Service are entitled to copies of any of these articles—a practical solution to the problem of keeping up to date.

THE PROMETHEUS ELECTRIC CORP.
New York, N. Y.
Booth E-10

Prometheus Electric Corporation demonstrates its entire line of autoclaves, sterilizers and food conveyors. These are manufactured in monel and stainless steel and incorporate many improvements in standard designs.

THE PYRAMID RUBBER CO.
Ravenna, Ohio
Booth E-20

How air in the bottle *prevents* air in the infant's stomach (cause of nursing colic) is graphically demonstrated with Evenflo nursers at Booth E-20. A robot-like device simulates a baby nursing to show the action of the Evenflo Patented Twin-Valve Nipple under actual nursing conditions. Also on display are Evenflo Brushless Baby Bottle Cleanser, the new Evenflo Deluxe Nurser with pyrex brand glass, and the new Evenflo Electric Baby Bottle Warmer.

RALSTON PURINA COMPANY
St. Louis, Mo.
Booth D-30

A beautiful new booth will attract your attention here. Colorful translights showing the composition of Instant Ralston and Hot Ralston cereals graphically portray their nutritive value and importance in the diet. Dietary uses for Ry-Krisp and Shredded Ralston are also presented in color. You may examine and register for a variety of valuable diets that may save you much consultation time—three nutritionally adequate low calorie diets, five allergy diets, and a series of four feeding direction forms for infants and young children.

RAYTHEON MFG. COMPANY
Waltham, Mass.
Booth E-27

The Microtherm, Raytheon's up-to-the-minute microwave diathermy, is featured. Completely post-war, the Microtherm offers an efficient, convenient and safe form of

deep heating apparatus. Significant features are: high absorption, penetrating energy for deep heating, effective production of active hyperemia. Representatives will be pleased to greet you.

REXALL DRUG CO.
Los Angeles, Calif.
Booths F-3, F-5

The Prechlometer, a clinical instrument for the determination of increased capillary fragility (increased permeability) by the application of suction over the biceps for one minute, will interest you here. It can evaluate the efficacy of therapeutic measures employing vitamin K or Ascorbic Acid when administered in the treatment of petechial hemorrhage, frequently associated with nutritional deficiencies, Dicumarol therapy, or found as a syndrome complicating many illnesses.

SANBORN COMPANY
Cambridge, Mass.
Booth E-24

An exhibit of interest to clinicians, specialists, and research men alike—in the fields of cardiology and endocrinology—will be found at the Sanborn booth. On display are working models of such clinical diagnostic instruments as the Sanborn Metabulator, the "all-enclosed" metabolism tester; and the Sanborn Viso-Cardiette, a leader among direct-writing electrocardiographs. These are supplemented by material on more specialized, research-type equipment, including the Viso-Cardiette with multi-channel analysis unit, research recorder; the Electromanometer, outstandingly useful for a wide variety of venous, arterial, intracardiac, and other "pressure" recordings; and other diagnostic instruments of still more recent development.

SANDOZ PHARMACEUTICALS
New York, N. Y.
Booth C-20

Physicians interested in migraine should visit this exhibit featuring an animated presentation of the current theory of the mechanism of migraine headache and relief following administration of Gynergen (ergotamine tartrate). Other preparations displayed include Digilanid (crystalline glycosides of Digitalis lanata), Sandoptal, Scillaren, and Calglucon (the original calcium gluconate).

W. B SAUNDERS COMPANY
Philadelphia, Pa.
Booth A-9

Doctors attending the Clinical Session are especially invited to look over the complete line of Saunders books including Hyman's INTEGRATED PRACTICE OF MEDICINE, Boeckus' GASTRO-ENTEROLOGY, Custer's ATLAS OF BLOOD AND BONE MARROW, Boerner & Sunderman's NORMAL VALUES, Friedberg's DISEASES OF THE HEART, Crile's PRACTICAL ASPECTS OF THYROID DISEASE, Levine & Harvey's CLINICAL AUSCULTATION OF THE HEART, Fine's CARE OF THE SURGICAL PATIENT, Boies' OTOLARYNGOLOGY, Boyd's MALARIOLOGY, and many other new books and new editions.

SEALY, INC.
Chicago, Ill.
Booth D-8

Such keen interest was shown by so many of the medical profession at the Atlantic City convention that the 27 factories of Sealy, Incorporated are again displaying the nationally accepted Sealy Orthopedic Firm-o-Rest mattress and box spring at the Clinical Session. Accepted for advertising in the *Journal of the American Medical Association*, Sealy's Orthopedic gives natural, non-sag suport to the patient's back. It is correctly firm yet completely comfortable and is the result of scientifically conducted research by technically trained men.

SEARER RUBBER COMPANY
Akron, Ohio
Booth F-20

One good reason for visiting this exhibit is an opportunity to become better acquainted with the Steadifeed Nurser—the nipple that "b-r-e-a-t-h-e-s." Steadifeed works like a tiny bellows—"breathes" in air as baby withdraws food, until the bottle is empty. Other advantages include: tight fit against bottle and cap; steady air feed to provide free passage of air; adaptability, etc.

G. D. SEARLE & CO.
Chicago, Ill.
Booths D-5, D-7

At the Searle booths, a large number of anatomic and pathologic subjects are exhibited in colored transaltes and colored slides. Featured is the new product Dramamine, used in all types of motion sickness. Other featured products of Searle Research include Aminophyllin, Diodoquin, Gold Sodium Thiosulfate, Iodochlorol, and Metamucil.

SHARP & DOHME, INC.
Philadelphia, Pa.
Booth B-10

Stable, portable 'Lyovac' Normal Human Plasma irradiated to destroy not only bacteria but also the viral contaminants that might cause homologous serum hepatitis merits your attention. Unusual Specialties including the popular sulfonamide drugs also will be of major interest. Courteous attendants will be pleased to serve you.

SHAY MEDICAL AGENCY
Chicago, Ill.
Booth B-15

Shay Medical Agency, a personnel placement service, has representatives in attendance, who specialize in the selection of candidates for positions in all branches of the Medical and Dental profession. You are invited to call upon them and discuss your own requirements in strict confidence. If you are an employer seeking help or an applicant seeking a position they can assist you. Whether your needs are immediate or for the future, stop by and talk it over.

THE SIKES CO., INC.
Buffalo, N. Y.
Booth B-6

Posture seating for office and secretarial use, together with reception room furniture, highlight the Sikes exhibit. Built around a revolving display, it gives prominence to the Sikes Executive Posture Chair and plainly shows its unusual features. Also shown are a secretarial chair with the same type of posture mechanism and a grouping of solid birch reception room furniture in the famous Sikes Butterscotch finish.

SMITH, KLINE & FRENCH LABS.
Philadelphia, Pa.
Booth D-10

'Benzedrine' Sulfate Tablets, N.N.R. is the focal point of attention in the S. K. F. exhibit. 'Benzedrine' Sulfate (racemic amphetamine sulfate, S. K. F.) can, in the majority of cases, be depended upon to break the stranglehold of mental depression. It is also highly effective in controlling appetite in the treatment of overweight —without the use (and risk) of thyroid. Valuable, too, in the treatment of narcolepsy and postencephalitic parkinsonism and as an adjunct in the management of alcoholism.

SPECIAL FORMULA CORP.
New York, N. Y.
Booth E-22

LYGENES VAGINAL SUPPOSITORIES, modern contraception in its simplest form is the principal feature of the Special Formula Corporation exhibit. The latest clinical and statistical evidence is available for examination and discussion. LYGEL VAGINAL JELLY is also exhibited, and complimentary samples of both products are available to physicians upon request.

SPENCER, INC.
New Haven, Conn.
Booth E-4 (W½)

On display here are Spencer Supports for men, women, and children—individually designed for each patient to meet the prescribed medical indications. Of special interest are Spencer's new SPINAL SUPPORTS FOR CHILDREN, breast supports for "problem breasts" (including mastectomy), and the SPENCER ABDOMINAL SPRING PAD (patented). See also Spencer's Blood Pressure Sleeve—fits any size arm and provides quick accurate readings.

R. J. STRASENBURGH CO.
Rochester, N. Y.
Booth D-6

For Monilial vulvovaginitis, Napryiate Suppositories Encapsulated—a new treatment form embodying the Sodium and Zinc Salts of Caprylic Acid—is featured. Other developments in the management of superficial fungus infections are presented in the forms of Napryiate (Brand of Caprylic Compound) Ointment, Napryiate (Brand of Caprylic Compound) Powder, and Sodium Caprylate Solution 20%.

STRONG, COBB & CO., INC.
Cleveland, Ohio
Booth F-4 (W½)

Automatic Injection of repository Penicillin in Oil with Aluminum Monostearate is now available in the DISPOSABLE AMPIN, A. M. A. Council Accepted. Presterilized and ready for immediate use at all times, the automatic Ampin injection of 1 cc. of Crystalline Procaine Penicillin G, 300,000 units per cc., in Peanut Oil with Aluminum Monostearate 2% is completed in less than one minute. See the first automatic injection of repository Procaine Penicillin G demonstrated and try Ampins for yourself.

SWIFT & COMPANY
Chicago, Ill.
Booth A-18

The original *all-meat* baby foods, Swift's Meats for Babies and Juniors, will catch your interest here. These high-protein, body building foods available in six varieties—Beef, Lamb, Veal, Pork, Heart, and Liver—are also widely used for adult special diets. You are cordially invited to discuss with the Swift representatives the clinical research being conducted on Strained and Diced Meats.

TAMPAX INCORPORATED
New York, N. Y.
Booth C-15

TAMPAX Incorporated presents, through colored photographic transparencies, a series of anatomical models sculptured by A. Belskie under the supervision of Robert Latou Dickinson, M.D. Also presented in colored transparencies are two anatomical charts, one showing "Female Pelvic Organs" and the other "Female Reproductive Organs," both of which were actually executed by Dr. Dickinson. Colored prints of these charts are available at the TAMPAX Booth.

TAYLOR INSTRUMENT COMPANIES
Rochester, N. Y.
Booth C-8

The Taylor Instrument Companies feature the exceptional Tycos Aneroid and Tycos Mercurial ten-year triple guarantees. The long service and dependable accuracy of the Tycos Aneroid is being demonstrated by an automatic inflation apparatus which has already inflated ten stock aneroid manometers over 173,357 times (the equivalent of 20 times a day for 23 years). Panels featuring the convenient ease-of-using Tycos models complete their presentation.

U. S. VITAMIN CORP.
New York, N. Y.
Booth A-14

Oil-in-water display demonstrates water solutions of oil-soluble vitamins, as exemplified by Aquasol Vitamin A Drops—first and only aqueous vitamin A preparation accepted by the Council on Pharmacy and Chemistry of the A. M. A. Latest literature describing more rapid absorption of aqueous vitamin A as compared with vitamin A oil solutions and clinical uses of water-soluble A solution are offered.

UNIVERSAL PRODUCTS CORP.
Norristown, Pa.
Booth C-26

You've often wished to have a light at the end of your finger. The new "Surgeons Fingalyte" shown here is just that. Built on finger tip, it penetrates into all cavities, gives perfect cold transillumination, and saves the physician's time. Other features include a headlight, weighing only two ounces, contained in a small case with constant sterilizing vapor; and the Surgeons "X-L-Lyte," with a record of 60,000 in use.

(*Continued on Advertising page 68*)

THE JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION

535 NORTH DEARBORN STREET - - - CHICAGO 10, ILL.

Edited by
MORRIS FISHBEIN, M.D.
Assistant Editor, AUSTIN SMITH, M.D.

Associate Editors
JOHNSON P. HAMMOND, M.D. RICHARD J. PLUNKETT, M.D.

Editor for Current Medical Literature, GEORGE HALPERIN, M.D.

Subscription price - - - - Twelve dollars per annum in advance

Cable Address - - - - "Medic, Chicago"

Please send in promptly notice of change of address, giving both old and new; always state whether the change is temporary or permanent. Such notice should mention all journals received from this office. Important information regarding contributions will be found on second advertising page following reading matter

SATURDAY, NOVEMBER 5, 1949

THE WASHINGTON CLINICAL SESSION

In this issue of THE JOURNAL is the program for the Clinical Session of the American Medical Association to be held in Washington, D. C., Dec. 6-9, 1949. This Session formerly was known as the Interim Session. It permits a meeting of the House of Delegates and the provision of graduate medical education for general practitioners of the area in which the meeting is held. However, this interim meeting has become so popular that many physicians attend from other areas.

The clinical part of the Clinical Session will provide a graduate education program replete with topics of broad appeal to practitioners. The subjects that will be discussed are on pages 704 through 713.

The meetings of the House of Delegates become increasingly important and the Reports of Officers to the House indicate the many activities of the Association and the problems that now face the medical profession. In line with the departure introduced at the 1948 St. Louis meeting, these reports will be the annual reports for the Bureaus and Councils of the Association. Formerly such reports were presented at the Annual Session. This new procedure lessens the demand on the time of the House of Delegates at the annual meeting. The General Practitioner's Award will be made at the close of the meeting of the House of Delegates on December 6. It will be followed by a social hour.

The Scientific and Technical Exhibits again will provide an interesting and informative part of the meeting. Scientific developments that have occurred since the last meeting of the Association and subjects that currently are of outstanding importance will be emphasized. The effectiveness of television as a teaching aid will be shown by color and black and white television demonstrations. Descriptions of the Scientific and Technical Exhibits start on pages 714 and 720, respectively. All exhibits and clinical presentations and panels will be held at the National Guard Armory.

Other activities during and immediately preceding the Clinical Session will include the Grass Roots Conference and an evening of entertainment. Attendance at the latter is limited to physicians and their families who are registered at the meeting.

Those who wish to attend the Washington Clinical Session should immediately request hotel reservations. These may be obtained by writing to the Chairman of the Subcommittee on Hotels, American Medical Association Hotel Reservation Bureau, Star Building, Washington 4, D. C.

CALCIFEROL IN LUPUS VULGARIS

The first important advance in the therapy of lupus vulgaris was the introduction by Finsen in 1897 of heliotherapy and of local treatment with concentrated ultraviolet rays. Emery, in 1849, treated patients with lupus vulgaris by administration of enormous doses of cod liver oil (1,000 cc. daily). He reported cure of 74 patients. The method never became popular and soon passed into oblivion. The work of Mellanby (1919), and of MacCollum, Steenbock, Windaus and other biochemists resulted in the isolation from cod liver oil of vitamin D and in the preparation of vitamin D_2, in 1931, by exposure of ergosterol to ultraviolet rays, which resulted in the isolation of crystalline, pure calciferol.

Charpy,[1] of Dijon, began in 1941 to treat patients with lupus vulgaris with massive doses of calciferol. He administered 15 mg. in a single dose three times weekly for the first week, twice weekly for the next three weeks and once weekly for several months. (One milligram equals 40,000 units.) He found the solution of the vitamin in alcohol more effective than the oily extract. He is emphatic about the need for a diet containing 1½ pints (710 cc.) of milk daily, plenty of meat, fruits and vegetables; salt intake should be much reduced, being omitted completely on three days a week. He believes that the healing process is not dependent on calcification, since there is no increase in the serum calcium levels during the course of treatment nor are there calcium deposits to be found in the healed lesions. Charpy in 1946 reported cure in 75 to 100 per cent of cases. Best results were obtained with almost toxic doses. The patient may experience anorexia, vomiting, depression, pallor, thirst and polyuria. These symptoms, however, disappear when treatment is stopped. To be effective the calciferol therapy

1. Charpy, M. J.: Le traitement des tuberculoses cutanées par la vitamine D₂ à hautes doses, Ann. de dermat. et syph. (series 8) 9: 310-346 (May-June) 1946.

V 1
194

must be combined with hygienic and alimentary regimens for tuberculosis in general.

Referendum of French dermatologists in 1946 supported Charpy's thesis as to the efficiency of calciferol in the treatment of cutaneous tuberculosis, the consensus being that cure can be obtained in 70 to 100 per cent of cases. A dissenting opinion was voiced by Meyer, whose results with this therapy paralleled those of Feeny in England. Feeny [2] treated 150 patients with lupus vulgaris with 100,000 to 150,000 units of calciferol daily. He stated the belief that the ultimate percentage of success with calciferol therapy would be much the same as with Finsen therapy except that calciferol therapy accomplishes the same results in one-half or one-third the time necessary for the Finsen therapy. Dowling,[3] in England, administered 150,000 units daily, the total dose amounting to 9,500,000 to 62,500,000 units in adults and 4,500,000 to 33,500,000 units in children. Although his results were not as striking as those of Charpy, he considered them satisfactory. Lomholt,[4] of Denmark, stated that treatment with the Finsen lamp as used at the Finsen Institute at Copenhagen, cures about 80 per cent of patients with lupus; the remaining 20 per cent are improved. He treated 130 patients, most of whom had had the disease more than thirty years, with vitamin D in large doses with excellent results.

The mode of action of calciferol in cutaneous tuberculosis has not been elucidated. Michelson,[5] in a recent review, discusses three hypotheses: the hypercalcemia, the direct effect on the bacilli and the improved metabolism. Steenken and Baldwin did not find in vitro evidence of a bactericidal effect on cultures of tubercle bacilli. Charpy believes that the modus operandi of calciferol in cutaneous tuberculosis is probably the same as that of the Finsen lamp. Vitamin D is produced and found in the skin. Ultraviolet irradiation is important in the production of vitamin D. Enrichment of the skin with vitamin D by feeding calciferol produces the same reaction as does treatment with Finsen's lamp in local areas. Michelson feels that the clinical cure of lupus vulgaris with calciferol is a certainty. The anatomic cure is still doubtful. Combined treatment with Finsen's lamp, calciferol and streptomycin may produce even better results. However, calciferol appears to be useful for the treatment of cutaneous and nodular tuberculosis and particularly for the treatment of lupus vulgaris.

2. Feeny, P. J.; Sandiland, E. L., and Franklin, L. M.: Calciferol in Tuberculosis: Review of One Hundred and Fifty Cases of Lupus Vulgaris, Lancet 2:438-443 (April 5) 1947.
3. Dowling, G. B.: Vitamin D in Cutaneous Tuberculosis, in Scientific Discussions, Lancet 2:398-399 (Sept. 13) 1947.
4. Lomholt, S.: Vitamin D in Cutaneous Tuberculosis, in Scientific Discussions, Lancet 2:398-399 (Sept. 13) 1947.
5. Michelson, H. E.: Calciferol in the Treatment of Cutaneous Tuberculosis, Arch. Dermat. & Syph. 58:680-695 (Dec.) 1948.

Current Comment

FIRE PROTECTION IN HOSPITALS

Fires are said to occur in hospitals at the rate of about 1,000 each year. In such circumstances, the safety of patients is of primary importance. The Factory Insurance Association, a nationwide insurance service organization, offers a plan for safeguarding hospitals against calamities due to fire. There should be an adequate fire alarm system arranged to transmit the alarm locally and simultaneously to the public fire department. A program of cooperation with the public fire department will do much to determine hidden fire hazards. Laboratories and pharmacies, where alcohol, ether and other inflammable liquids and gases are kept, should be segregated and properly protected. Refrigerators should not be used to store even small quantities of inflammable material which may be ignited by arcing electric equipment. The servicing of ambulances and other motor vehicles in hospital buildings can be hazardous. A continuing program to train hospital employees in fire safety is important. Fire drills, classroom sessions and the actual use of fire-fighting equipment will aid in safeguarding against the perils of fire. Provision should be made to prevent accidents in operating rooms where flammable anesthetics are used. A plan should be developed to evacuate patients from the locality of any fire. Exits should be kept unobstructed. Patients, visitors and staff personnel should be prohibited from smoking, in the interest of safety. Unnecessary combustibles, such as draperies and decorative sheathing, should be eliminated from hospitals, and noncombustible enclosures should be provided for all vertical openings, such as elevators, stairways and laundry chutes. When new hospitals are built, certain additional safeguards should be provided. Fire-resistive construction should be used, and standard fire cut-off walls should be constructed at all vertical openings. Operating rooms should have conductive floors. Maintenance shops and major storage facilities should be located in detached structures. Both existing hospitals and new hospitals should have automatic sprinkler systems wherever there are any concentrations of combustibles, such as in laundries, kitchens and storage rooms.

PSYCHOSIS FROM MYXEDEMA

According to Asher "Myxoedema is one of the most important, one of the least known, and one of the most frequently missed causes of organic psychoses. . . ." [1] He recently reported on fourteen instances of "myxedematous madness," which is not a newly reognized condition. It was considered common by the Committee of the Clinical Society of London in 1888. However, some physicians, while aware of the fact that dulness and poor memory are caused by myxedema, do not realize that a frank psychosis can occur. None of the 14 patients reported by Asher had been given a diagnosis previously by the physician in charge;

1. Asher, R.: Myxoedematous Madness, Brit. M. J. 2:555 (Sept. 10) 1949.

10 were admitted to the mental observation wards of the hospital under the Lunacy Act. In 9 of the 14 patients a dramatic and complete recovery occurred with thyroid treatment, while in 2 more there was partial improvement. One did not show any mental change with thyroid medication, and 2 patients died. The patients reported showed various types of psychoses, among which delusions, hallucinations, paranoia, dementia and melancholia all numbered. In addition to calling attention to this apparently important cause of psychosis (at least in England), Asher offers the significant remark that, because in recorded cases of myxedema insanity the condition closely resembles paranoia, melancholia and other orthodox psychoses, other common mental disorders, such as schizophrenia and mania, may prove to be manifestations of underlying organic disease. Of similar interest are reports of euphoria in patients with rheumatoid arthritis to whom cortisone had been administered.

DURATION OF LIFE FOLLOWING SURGICAL COLLAPSE IN PULMONARY TUBERCULOSIS

An evaluation of operative treatment of pulmonary tuberculosis from the Renström Tuberculosis Hospital in Gothenburg [1] includes a study of all patients operated on from March 1931 to Oct. 1, 1948. Most of the operations consisted of apicolysis combined with partial thoracoplasty. Approximately as many men as women were included in the study, with the exception of a group treated with phrenic exeresis in which there were twice as many women as men. During the first two years, nearly all operations were total thoracoplasties (more than eight ribs removed): the first year year in two stages according to Sauerbruch and the following year in one stage. In 1933-1934, most of the thoracoplasties were designed as one stage upper thoracoplasties without apicolysis. Since then radical thoracoplasties have not been performed. During 1934 the one stage upper thoracoplasties combined with apicolysis became the adopted method. In 1937 the technic was modified by two stage operations, this being the method of choice until 1942. To lower the operative mortality rate, the one stage operation was replaced by the two stage in 1943. The third rib was resected and the apicolysis accomplished in the first stage; the first and second ribs were removed at a second operation; this was followed by the removal of the lower ribs at the third stage. Evaluation in 1948 indicated that the combined mortality rate for the two stages in a three stage operation did not differ appreciably from the mortality figures after the first stage in two stage operations. In consequence, the two stage operations were utilized. The 2,216 operations were performed on 1,159 persons. Although the literature on the surgical treatment of pulmonary tuberculosis is extensive, figures are not comparable and possess limited value because they do not permit conclusions regarding the duration of life or the fatality risks in different years of observation. Two months are commonly adopted as the time demarcating operative fatality, all subsequent deaths being labeled late fatalities. In addition, a tendency exists to improve results by deducting deaths due to diseases other than tuberculosis. In the present report, results have been judged only by the mortality rate without regard to working capacity, cessation of bacillary discharge or other circumstances. The only objective should be the duration of life of the patients, but even then many imponderable circumstances might render comparisons impossible. The greatest number of deaths among surgically treated patients with pulmonary tuberculosis occur during the first year after the operation. During the years 1931 to 1937 a substantial number of phrenicus exeresis operations was performed, some later followed by thoracoplasties. Phrenicus exeresis does not have a demonstrable curative effect on pulmonary tuberculosis. As the operation, in addition, is now known to have a deleterious effect on the functioning of the lung, there are definite reasons for abandoning the method. In the early days of collapse therapy, pulmonary compression was the accepted conception of its curative mechanism. Today opinions differ. Now collapse operations aim at providing healing conditions by removing obstacles to cicatricial shrinkage. Thoracoplasty apicolysis revealed a cumulative mortality rate after nine years of observation as 38.5 per cent, as compared with 65.9 per cent for the control group. The sum of all the yearly observations during the ten year period showed an annual mortality rate of 7.2 per cent in the surgically treated group, with 14.9 per cent in the control group. The nine years' cumulative mortality rate for phrenicus exeresis was 63.7 per cent, compared with 65.4 per cent for controls, while the yearly mortality rate in ten years' observations was 12.3 per cent with 13.6 per cent for the controls. Significant for evaluation is the fact that most of the operations were performed by one operator (Lundberg).

1. Lundberg, S.: Experiences of Surgical Collapse Treatment of Pulmonary Tuberculosis with Particular Consideration of Postoperative Duration of Life, Acta tubere. Scandinav. (Supp.) 20:1, 1949.

BULLETIN 70 OF THE BUREAU OF MEDICAL ECONOMIC RESEARCH

The Bureau of Medical Economic Research of the American Medical Association has prepared a bulletin in which is reviewed the history of the attitude of the American Medical Association toward voluntary health insurance plans from 1916 to now. The Bureau concludes that the American Medical Association has never opposed the development of voluntary sickness insurance plans as they exist today. In fact, the Association has encouraged continuously the development of voluntary plans on a sound financial and medical care basis. This bulletin may be obtained on request from the Bureau.

ORGANIZATION SECTION

Official Notes

WORLD MEDICAL ASSOCIATION

At the recent third general assembly in London, England, Dr. Elmer L. Henderson of Louisville, Ky., President-Elect of the American Medical Association, was elected President-Elect also of the World Medical Association. Dr. Henderson was thus honored by delegates from 30 countries. He will take over the presidency of the World Medical Association when the assembly meets in New York next October, succeeding Dr. Charles Hill of the British Medical Association. Dr. Henderson will become President of the American Medical Association at the San Francisco Session next June. At the same meeting in London Dr. R. L. Sensenich of South Bend, Ind., a recent Past President of the American Medical Association, was elected a member of the Council of the World Medical Association.

Washington Letter

(From a Special Correspondent)

Oct. 31, 1949.

Senator Dulles' Views on Socialized Medicine

As a result of prominence given the issue of compulsory health insurance in the senatorial contest between Senator John Foster Dulles (Republican, New York) and Herbert H. Lehman, the Democratic nominee, the incumbent's office received large numbers of communications commending his position against federalized medicine. Senator Dulles acknowledged their receipt with the following letter:

"It is gratifying to have your recent communication expressing opposition to the Administration's socialized medicine program. On this point we are in entire accord, for I am unalterably opposed to any attempt to impose a compulsory health program on the people and on the medical profession of this country.

"To me, socialized medicine would mean regimentation, not only of doctors, surgeons, dentists and nurses but of their patients as well. It would mean the end of the intimate professional relationship between doctor and patient, the relationship which has a vital spiritual quality. I have seen regimentation tried in Russia and in England. I do not want to see it tried in this country. There is a better way—the American way—to insure the health of our people. We must expand the already rapidly growing voluntary health plans. We must, by private and public means, speed the construction of hospitals and diagnostic centers. We must provide funds, private and public, to help overcome our shortage of doctors, nurses and medical technicians. We can do this job without socializing our medical profession."

State Health Officers Favor Department of Health

The Association of State and Territorial Health Officers reaffirmed its opposition to compulsory health insurance when, at its October meeting in Washington, it adopted unanimously a resolution condemning legislation to that end. Other resolutions called for establishment by Congress of a Department of Health in the President's Cabinet, to be headed by a career physician of the U. S. Public Health Service; government support of a personnel procurement pool that would be administered by the American Public Health Association; federal financial aid to medical schools for strengthening of instruction in public health, and U. S. Public Health Service cooperation in arranging for a communicable disease conference in 1950 similar to the one recently held in Atlanta. Dr. Wilton L. Halverson, California director of health, was elected president of the association. Dr. Roy L. Cleere, of Colorado, was elected vice president and Dr. L. E. Burney, of Indiana, was reelected secretary-treasurer.

Coming Medical Meetings

American Medical Association Clinical Session, Washington, D. C., December 6-9. Dr. George F. Lull, 535 N. Dearborn, St., Chicago, Secretary.

American Academy of Pediatrics, San Francisco, Nov. 14-17. Dr. Clifford G. Grulee, 636 Church St., Evanston, Ill., Secretary.

American Medical Women's Association, Midyear Meeting, Tucson, Ariz., Nov. 10-11. Dr. Grace Talbott, 49 W. 49th St., New York 20, Corresponding Secretary.

American Society for the Study of Arteriosclerosis, Chicago, Hotel Knickerbocker, Nov. 3-7. Dr. O. J. Pollak, Quincy City Hospital, Quincy 69, Mass., Secretary.

American Society of Anesthesiologists, New York, Hotel New Yorker, Dec. 7-10. Dr. Curtiss B. Hickson, 188 W. Randolph St., Chicago 1, Secretary.

American Society of Tropical Medicine, Memphis, Tenn., Nov. 6-9. Dr. Frederick J. Brady, National Institute of Health, Bethesda 14, Md., Secretary.

Association of Military Surgeons of the United States, Washington, D. C., Nov. 10-12. Col. James M. Phalen, Army Institute of Pathology, Washington 25, D. C., Secretary.

International College of Surgeons, United States Chapter, Atlantic City, Haddon Hall, Nov. 7-12. Dr. Arnold S. Jackson, 1516 Lake Shore Drive, Chicago 10, Secretary.

Post Graduate Medical Assembly of South Texas, Houston, Nov. 29-Dec. 1. Dr. E. Trowbridge Wolf, 229 Medical Arts Bldg., Houston, Secretary.

Puerto Rico, Medical Association of, San Juan, Dec. 14-18. Dr. Juan Basora-Dehlle, 1459 Americo St., Santurce, Secretary.

Radiological Society of North America, Cleveland, Dec. 4-9. Dr. Donald S. Childs, 713 E. Genesee St., Syracuse 2, N. Y., Secretary.

Southern Medical Association, Cincinnati, Nov. 14-17. Mr. C. P. Loraine, Empire Building, Birmingham, Ala., Secretary.

Southern Psychiatric Association, New Orleans, Nov. 27-29. Dr. Newdigate M. Owensby, 384 Peachtree St., N.E., Atlanta, Georgia, Secretary.

Southern Society of Electroencephalography, New Orleans, Nov. 30. Dr. Samuel C. Little, 2111 Highland Ave., Birmingham 5, Ala., Secretary.

Southern Surgical Association, Hot Springs, Va., The Homestead, Dec. 6-8. Dr. John C. Burch, 2112 West End Ave., Nashville 5, Tenn., Secretary.

Southwestern Medical Association, Albuquerque, New Mexico, Nov. 9-12. Dr. Wickliffe R. Curtis, First National Bank Bldg., El Paso, Texas, Secretary.

Western Surgical Association, Santa Barbara, Calif., Nov.29-Dec. 2. Dr. Warren H. Cole, 1853 W. Polk St., Chicago 12, Secretary.

Woman's Auxiliary

CONFERENCE OF PRESIDENTS AND CHAIRMEN

The Woman's Auxiliary of the American Medical Association held a conference of state presidents, presidents-elect and national chairmen of standing committees in Chicago, November 3-4. The conference theme was the American Medical Association's Twelve Point Program. After a business meeting there was a question and answer period and a discussion of auxiliary activities. On the conference program were Dr. Andrew C. Ivy, vice president, University of Illinois, who spoke on "Medical Education and Research"; Dr. James R. Miller of the Board of Trustees, on "Commission on Chronic Illness"; Fred V. Hein of the American Medical Association headquarters, on "School Health Program"; Lawrence Rember of the American Medical Association headquarters, on "Public Relations," and Thomas A. Hendricks of the Council on Medical Service, "The Dead Horse and Community Health Leadership." At the Thursday luncheon, Mrs. Charles W. Sewell of the Associated Women of American Farm Bureau discussed "The Farm Bureau Federation and the Health Problem." At the Friday luncheon, the speakers were the following officers of the American Medical Association: Drs. Ernest E. Irons, President; Elmer L. Henderson, President-Elect; J. J. Moore, Treasurer, and George F. Lull, Secretary and General Manager.

GOVERNMENT SERVICES

ARMY

NEW PLAN TO CONSERVE PROFESSIONAL PERSONNEL

A newly adopted Army plan will result in greater economy in the use of scarce professional personnel in military hospitals in theaters of operations according to Major Gen. R. W. Bliss, the Surgeon General.

Under this plan fewer physicians or dentists will be ordered to active duty with Army medical units until those units are ready to move into a theater of operations. General Bliss said, "This should allow each doctor to remain in active practice in his community until the Army has an actual need for his services with troops in combat."

The new plan is the result of an intensive study of experiences of the Army Medical Department during World War II. At that time doctors were required to join units while medical technicians and administrative personnel were being trained in the setting up, operating and dismantling of mobile field medical equipment. This resulted in a loss of skilled professional manpower, not only to the Army but to the doctor's civilian community as well.

Hospital personnel will now be divided into two groups—administrative and professional personnel. The professional group will be known as the "professional complement" and will be made up of physicians, dentists, nurses and other specialists. They will not be required to join the unit until such time as the unit is engaged in the actual care of patients. Further, when the requirement for this group has ceased, they may be moved to another theater of operations or to another area within a theater where their professional services will be put to use with a minimum of delay. The administrative group would remain to oversee the moving of equipment and records of the unit. In this way maximum use may be made of the professional complement's services.

Of the forty-seven professional persons required for a type of field hospital, under the new plan, only four officers would be required at all times for duty with the unit. The remaining forty-three officers would not be needed during the organization and training period of the unit. Although more applicable to wartime than to peacetime conditions, all field type Army hospitals will eventually be organized according to this plan.

APPOINT NEW DIRECTOR OF LIBRARY

Major Frank B. Rogers (MC) was named director of the Army Medical Library at the Sixth Annual Meeting of the Association of Honorary Consultants to The Library, October 21. Major Rogers has been assistant director under Col. Joseph H. McNinch (MC), who is being reassigned to the Office of the Surgeon General. Colonel McNinch will continue as chief of the Historical Division, where he is supervising the preparation of the history of the Army Medical Department in World War II. Major Rogers received his Master's Degree in Library Service in June of this year at Columbia University, which gives him the distinction, the Surgeon General's office states, of being one of the two men in the world who is both a physician and a librarian.

Major Rogers received his A. B. degree at Yale in 1936 and his M.D. degree at Ohio State University in 1942 and interned at Letterman Army General Hospital in San Francisco. He entered the military service in 1943.

MONTHLY MEDICAL MEETING

At the monthly medical meeting of the Surgeon General held October 20 at the Army Medical Center, Washington, D. C., Col. Carl W. Tempel (MC) chief of the Tuberculosis Branch at Fitzsimons General Hospital, Denver, discussed "Recent Advances in the Treatment of Pulmonary Tuberculosis." Dr. Esmond R. Long, director, Henry Phipps Institute, Philadelphia, and consultant on tuberculosis to the Surgeon General, opened the discussion.

NAVY

CORRESPONDENCE COURSES

The following additional correspondence courses administered by the Bureau of Medicine and Surgery are available for distribution and may be obtained from the Bureau of Medicine and Surgery, Washington, D. C., by qualified Regular and Reserve medical department personnel on request:

Title of Course	Promotion Units	Retirement Points
Clinical Laboratory Procedures	3	36
Special Clinical Services (General)	2½	32
Tropical Medicine in the Field	2½	32
Combat and Field Medicine Practice	2½	32
Functions of Officers of Medical Department	1	12
Submarine Medicine Practice	2½	32
Aviation Medicine Practice	2½	32
Naval Preventive Medicine	3	36
Special Clinical Services (Dental)	2½	32

Officers of the Medical Corps, Dental Corps, Medical Service Corps, Nurse Corps and Hospital Corps of the regular Navy and Naval Reserve are eligible to enroll in any one of these courses. Enlisted personnel of the Hospital Corps are eligible to enroll for the Clinical Laboratory Procedures course and for the Special Clinical Services (General) course.

Applications for enrolment should be made to the Bureau of Medicine and Surgery via appropriate official channels; they must include the full name of the applicant, rank or rate, corps, file or service number and the address to which the material is to be forwarded.

INSECTICIDE SPRAY FOR OVERSEAS TRANSPORT PLANES

An insecticide spray system designed to rid overseas transport planes of dangerous insect pests before they arrive in the United States has been developed by the Navy in cooperation with the U. S. Public Health Service and the Department of Agriculture. The system, which the pilot operates by pushing a button on his control panel, automatically sprays the proper quarantine dosage of freon®-propelled insecticide throughout the interior of aircraft. The new equipment is used to spray the interior of a transport plane with a heavy dosage of insecticide sufficient to kill the more resistant crawling insects before any passengers go aboard. This is followed with a lighter spray dosage, after the passengers are seated and the plane is airborne, to destroy any flying insects that may have entered during the loading process.

NEW FLIGHT SURGEONS

The following naval flight surgeons recently received their diplomas at the Naval School of Aviation Medicine, Pensacola, Fla.

Squadron Leader Jemi Manekshaw (Royal Indian Air Force), Bombay, India.

Lieut. Oscar A. Oliva Otero (Argentine Navy), Cordoba, Republica Argentina.

Lieut. (jg) Joseph L. Mays, Jackson, Ga.

Lieut. (jg) David R. Rehers, Glade Spring, Va.

PUBLIC HEALTH SERVICE

REGULAR CORPS EXAMINATION FOR SCIENTISTS AND SANITARIANS

Examinations for scientists and sanitarians (entomologists, parasitologists and protozoologists) will be held December 12-14 in various cities throughout the country. Completed applications must be in the Washington Office by November 14. Appointments are permanent and provide opportunities for career service in research and public health activities. Appointments will be made in the grade of assistant and senior assistant, equivalent to Army ranks of first lieutenant and captain, respectively. Minimum requirements for assistant and senior assistant scientist are a doctor's degree and seven years' training and experience after high school; for assistant and senior assistant sanitarian a master's degree and seven years' training and experience after high school are required.

For information write to: Surgeon General, United States Public Health Service, Federal Security Agency, Washington 25, D. C. Attention: Division of Commissioned Officers.

GLAUCOMA SCREENING PROGRAM

Surgeon General Leonard A. Scheele announced on October 9 that the Public Health Service and the Philadelphia Committee for the Prevention of Blindness had signed a cooperative agreement under which the service will offer its help to enable employment of a full time staff for a mass glaucoma-screening program. This is the first time that the Public Health Service has formally participated in the conservation of eyesight with a private agency. A pioneer program for glaucoma screening has been conducted by the Philadelphia Committee for the Prevention of Blindness. The examinations showed that of more than 5,300 persons over the age of 40 who ostensibly had normal eyesight 2.7 per cent were victims of glaucoma. On the basis of studies made, it is estimated that 800,000 persons in the United States have glaucoma without being aware of the disease. Early symptoms are so mild that the person affected usually does not seek medical care until his eyesight is impaired or lost.

VETERANS ADMINISTRATION

NEW HOSPITAL IN CHICAGO

The Veterans Administration has announced the award of a $6,985,905 contract to the J. L. Simmons Company, Chicago, for the construction of a 500 bed general hospital. The building site is a 13 acre tract in the medical center district on Chicago's west side.

Construction will include a 4,274,000 cubic foot main hospital building, recreation hall, chapel, nurses and attendants quarters, boiler house, radial brick chimney, steel flag pole, electrical substation and connecting corridor. The buildings will have concrete foundations, brick-faced exterior walls with stone trim backed with hollow tile, reinforced concrete floors and built-up roofs.

NEW HOSPITAL IN PHILADELPHIA

Bids will be accepted until December 6 for the construction of a 500 bed hospital in Philadelphia on an 18 acre site near the University of Pennsylvania Medical School and General Hospital. The construction project consists of a hospital building, nurses quarters, apartment building, attendants' quarters, garage, laundry and other structures. The buildings generally are to have concrete foundations, structural steel framing and reinforced concrete floors. Walls are to have brick-faced exteriors with stone trim and backed with hollow tile. Bids, prepared in triplicate, should be addressed to the Director, Construction Service, Veterans Administration, Washington 25, D. C.

MISCELLANEOUS

SEND RADIOISOTOPES TO FOREIGN COUNTRIES

The Atomic Energy Commission announced that, in the two years since September 1947, 616 shipments of radioactive isotopes have been made to twenty-two countries for use in medical research and therapy and scientific research. The radioactive materials available for export have been limited to twenty radioisotopes which are of primary value for clinical and biologic applications.

About 90 per cent of the foreign isotope shipments have been used in the fields of medical therapy or physiologic research. Research investigations are concerned with such problems as studying the metabolism of proteins, nucleic acids and phosphorus-containing compounds, the behavior of the thyroid gland under various conditions and the biologic production, absorption and excretion of penicillin. Present indications are that the results of foreign studies will provide valuable information to researchers in the United States.

A drawback to wider foreign utilization of radioisotopes has been the lack of trained personnel. To assist in overcoming this difficulty, the commission has approved attendance of a limited number of foreign scientists from countries which have qualified to receive isotopes, at the courses in radioisotope technic being offered by the Oak Ridge Institute of Nuclear Studies. To date sixteen scientists from Belgium, Canada, Denmark, Finland, India, Netherlands, New Zealand, Norway, Spain and England have attended these courses.

The British have already commenced shipment of radioisotopes to various European countries. The commission is cooperating with British and Canadian representatives in matters related to policies of radioisotope distribution. To qualify for receipt of radioisotopes produced in Commission facilities, a foreign country must first make application through diplomatic channels to the Department of State and agree to use the material only in the manner described in the request and to report semiannually to the commission on progress of research work done with isotopes. Each country also agrees to permit qualified scientists, irrespective of nationality, to visit those laboratories where isotopes are being used.

EIGHTEEN RESEARCH PROPOSALS

The Atomic Energy Commission Division of Biology and Medicine has approved eighteen research proposals during the past three months, Dr. Shields Warren, division director, has announced. Negotiations leading to the award of contracts covering the newly approved research projects are under way. The contracts will be awarded by the Atomic Energy Commission Operations Office nearest the institution conducting the research. Approval of the proposals was recommended in each case by the Atomic Energy Commission Advisory Committee on Biology and Medicine. The award of contracts to the eighteen institutions involved will bring to a total of one hundred and fifty the number of research projects supported by the Atomic Energy Commission being carried on in medicine, biology, cancer studies and biophysics at universities, hospitals and research centers. About $5,000,000 has been earmarked by the commission for support of such research in nongovernment agencies during fiscal year 1950.

Medical News

(Physicians will confer a favor by sending for this department items of news of general interest: such as relate to society activities, new hospitals, education and public health. Programs should be received at least two weeks before the date of meeting.)

CALIFORNIA

Lane Medical Lectures.—The thirtieth course of Lane Medical Lectures will be presented October 31, November 3, 7 and 10 at 8:15 p. m. in Lane Hall, Stanford University School of Medicine, San Francisco. Dr. James L. Gamble, chairman, department of pediatrics, Harvard Medical School, Boston, will deliver the lectures the titles of which will be as follows: "Normal and Morbid Anatomy of the Electrolyte Structure," "The Interdependence of Water and Electrolyte Balance," "Processes of Dehydration" and "Rationale of Parenteral Fluid Therapy." Physicians, students, teachers and research workers in medicine and allied sciences are invited to attend.

CONNECTICUT

Progress of Cardiac Survey.—A total of 610 children were examined during the past school year in the New Haven Rheumatic Fever and Cardiac Program established in 1947 in cooperation with the State Department of Health and the department of pediatrics of Yale University School of Medicine. There were 189 with rheumatic fever or rheumatic heart disease; 14 unsuspected cases of acute rheumatic fever were discovered. Rheumatic heart disease was found in 134, 83 of whom had a history of rheumatic fever. Congenital heart disease was found in 70 cases, 16 unsuspected. Functional murmurs with no heart disease were discovered in 348 cases. Four of the children had arrhythmias, and 26 had hypertension. A corrected cardiac registry has recently been started with the help of privately donated funds. It is hoped that through contact with the individual doctors concerned with patients on the registry, progress of these children through the school years will be followed and evaluation of services needed can be made.

ILLINOIS

Assembly Hour Lecture.—Dr. Frederic T. Jung, Assistant Secretary, Council on Physical Medicine and Rehabilitation, American Medical Association, delivered the assembly hour lecture at the University of Illinois, Chicago Professional Colleges, October 26, on "Medical Quackery."

Chicago

Reception to James B. Herrick.—Several hundred fellows of the Institute of Medicine and guests paid tribute to Dr. and Mrs. James B. Herrick at a reception with the University of Chicago press at the Institute of Medicine on October 24. The reception was given to mark the publication of Dr. Herrick's autobiography, "Memories of Eighty Years."

Joint Meeting.—A joint meeting of the Chicago Society of Internal Medicine and Institute of Medicine of Chicago will be held November 28 at the Drake Hotel at 8 p. m. The following program has been prepared:

Robert J. Hasterlik, Evanston, Beryllium Poisoning.
Dwight E. Clark, Chicago, Diagnosis and Treatment of Thyroid Diseases with Radioactive Iodine.
John Martin, Chicago, Use of Radioactive Isotopes in Neurologic Diagnosis.

Award Koessler Fellowship.—The Jessie Horton Koessler Fellowship for the aid of research in biochemistry, physiology, bacteriology or pathology, which carries a stipend of $500, has been awarded for 1949-1950 to Charlotte Robertson, who received her A.B. from the University of Illinois in 1948. She will work under the direction of Dr. Andrew C. Ivy, department of clinical science, University of Illinois College of Medicine, on the loss of sensitivity to stimulation by cholenergic drugs manifested by denervated sweat glands.

The Abt and Hess Lectures.—Dr. Sidney Farber, Boston, delivered both the Isaac Abt and Julius Hess lectures in the Archibald Church Library of Northwestern University, Chicago, October 18 on "Cancer in Children: An Experimental Approach to Therapy" and at the University of Illinois College of Medicine, Chicago, October 19 on "Cancer in Children: Life History and Biological Behavior." The twin lectureships are being established by the Phi Delta Epsilon Medical Fraternity at Northwestern University Medical School and at the University of Illinois College of Medicine.

Biennial Milk Survey.—On October 10, the U. S. Public Health Service and the Illinois Department of Public Health began the biennial sanitation survey of the Chicago milk shed. The survey, the completion of which requires about eight weeks, will rate Chicago's compliance with the requirements of the Public Health Service grade A milk ordinance. The survey will cover several hundred of the 20,912 farms, one third of the 116 milk-receiving stations and one half of the 87 pasteurization plants which supply Chicagoans with over 1,750,000 quarts of grade A milk a day. Farms, receiving stations and pasteurization plants will be selected at random for the study. The survey teams will investigate the physical conditions, maintenance and sanitation of dairy farms in northwestern Wisconsin, central and southern Wisconsin, Illinois, northern Indiana and central Michigan which produce milk for Chicago. During the period 1947 and 1948, Chicago was the only city in the country with over 100,000 population to be awarded a Public Health Service milk sanitation rating of more than 90 per cent. About 4,000 dairy farms have been added to the Chicago milk shed since the last biennial survey in September 1947.

INDIANA

State Medical Election.—The Indiana State Medical Association at its recent meeting in September chose the following officers for the coming year: Drs. Claude S. Black, Warren, president; Alfred H. Ellison, South Bend, president-elect, and Arthur F. Weyerbacher, Indianapolis, treasurer.

Healthwin Hospital Dedicated.—The dedication of Healthwin Hospital, St. Joseph County, South Bend, Ind., was held September 17. Dr. Ernest E. Irons, Chicago, President of the American Medical Association, delivered the address. Healthwin Hospital began as a tuberculosis camp in 1908. Its modernization program, just completed, was financed by the St. Joseph County Council, which appropriated $1,522,000 for the project. Its facilities for the care of the tuberculous are complete. It has beds for 185 patients and quarters for a staff of 85. In addition, there are classrooms for patients to continue their education through high school, shops for vocational training and occupational therapy and recreational facilities.

KENTUCKY

State Medical Election.—At the annual meeting of the Kentucky State Medical Association in October the following officers were elected: Drs. Hugh L. Houston, Murray, president, and Samuel A. Overstreet, Louisville, president-elect; Bruce Underwood and Woodford B. Troutman, both of Louisville, will continue to serve as secretary and treasurer, respectively.

Testimonial to Dr. Elmer L. Henderson.—Members of the Jackson County Medical Society and other friends gave a testimonial dinner to Dr. Elmer L. Henderson of Louisville in the Brown Hotel, October 26, in honor of his recent election as President-Elect of the American Medical Association. The toastmaster was Dr. J. B. Lukins, and the address was given by Dr. Louis H. Bauer of Hempstead, N. Y., Chairman, Board of Trustees, American Medical Association; other speakers were Drs. Harrison H. Shoulders, Nashville, Tenn., past president of the American Medical Association; George F. Lull, Chicago, Secretary and General Manager; Fred W. Rankin, Lexington, past president of the American Medical Association, and J. Murray Kinsman, dean of the University of Louisville Medical School.

MASSACHUSETTS

Public Health Association Meeting.—The Massachusetts Public Health Association will hold its annual fall meeting at Simmons College, Boston, on November 17. Fourteen experts will speak during the afternoon session. The general evening session will feature a panel discussion entitled "How John Q. Boston Was Persuaded To Be X-Rayed." Dr. John F. Conlin, general chairman of the Boston Chest X-Ray Program and director of medical information and education, Massachusetts Medical Society, will serve as panel leader. A second panel, led by Dr. Sidney Cobb, Ayer, director of the Nashoba Associated Boards of Health, will consider the problem "Should We Let Community Organization Die?"

Report of Kennedy Foundation.—The Joseph P. Kennedy Jr. Memorial Foundation on August 12 reported gifts totaling $440,000 to various Massachusetts organizations. The Lahey Foundation, Boston, received $50,000; the building fund of Kennedy Memorial Hospital for crippled children, Boston, $125,000; St. Coletta's School for Children at Hanover, $100,000; Shriner's Hospital for Crippled Children, Spring-

field, $75,000; Cape Cod Hospital, Hyannis, $15,600, and other special gifts, $74,400. The gifts brought to $1,500,000 the total presented by the foundation since its establishment four years ago in memory of Mr. Kennedy, oldest son of the former ambassador to Great Britain, who died in action during the recent war while serving as a lieutenant in the U. S. Navy Air Forces.

MISSOURI

Postgraduate Seminar at Fayette.—The Missouri Academy of General Practice is offering a postgraduate seminar at Fayette for general practitioners in central Missouri. The course began on October 12 and will be held each Wednesday through November 16 at 7 p. m. Dr. Merl J. Carson, assistant dean of Washington University School of Medicine, St. Louis, arranged for the schedule, which will be conducted by the medical school staff. No registration fee is charged. Similar meetings will be held in various sections of the state in order that refresher courses will be provided for rural physicians in their immediate vicinity. For information communicate with Dr. William Shaw of Fayette, Mo.

NEW YORK

Postgraduate Instruction.—The Utica Academy of Medicine will be addressed November 17 by Dr. Frederick H. Vom Saal, New York, on "Intramedullary Fixation of the Femur and Tibia." The Fulton County Medical Society on November 17 at 9 p. m. at the Eccentric Club, Gloversville, will hear Dr. Francis D. Speer, New York, speak on "Clinical and Laboratory Fundamentals in Fluid-Electrolyte Balance." This instruction has been arranged by the Medical Society of the State of New York with the cooperation of the New York State Department of Health.

New York City

Personal.—Dr. Robert S. Hotchkiss has been appointed professor and chairman of the department of urology at the New York University Post-Gradute Medical School, a unit of the New York University Bellevue Medical Center. Dr. Hotchkiss was a member of the faculty at New York University for many years and then left to become associate professor of surgery at Cornell University Medical College.

Louis Livingston Seaman Fund.—The New York Academy of Medicine announces the availability of the Louis Livingston Seaman Fund for the furtherance of research in bacteriology and sanitary science. Twelve hundred dollars is available for assignment in 1949. This fund has been made possible by the terms of the will of the late Dr. Louis Livingston Seaman and is administered by a committee of the academy under the following regulations: (1) The committee will receive applications either from institutions or individuals up to Nov. 15, 1949. Communications should be addressed to Dr. Wilson G. Smillie, chairman, Louis Livingston Seaman Fund, 1300 York Avenue, New York 21. (2) The fund will be expended only in grants in aid for investigation or scholarships for research in bacteriology or sanitary science. The expenditures may be made for (*a*) securing of technical help, (*b*) aid in publishing original work and (*c*) purchase of necessary books or apparatus.

PENNSYLVANIA

Conference on the Exceptional Child.—A conference will be held under the auspices of the Child Research Clinic of the Woods Schools, Langhorne, Pa., in collaboration with the departments of Health, Public Instruction and Welfare of the Commonwealth of Pennsylvania at the Education Building Forum, Harrisburg, November 7. Speakers included in the program are:

Hon. James H. Duff, Pennsylvania's Child Welfare Program.
Mr. Richard Thorington, Philadelphia, Financial Provision for Public or Private Care of the Exceptional Child.
J. Franklin Robinson, Wilkes-Barre, Surgery, Drugs and Other Therapeutic Approaches to the Treatment of the Exceptional Child.
Richard H. Hungerford, Ph.D., New York, Vocational Planning for the Exceptional Child Who Can Be Wholly or Partly Self Sustaining.
Leslie B. Hohman, Durham, N. C., A Philosophic Approach to the Exceptional.

A panel discussion will be held on "Certain Contemporary Problems Concerning the Exceptional Child." The moderator will be Lester N. Myer, Ph.D., chief, Division of Special Education, Department of Public Instruction of Pennsylvania.

Philadelphia

Center for Preventive Medicine.—Ground-breaking ceremonies were held October 17 for a $1,500,000 diagnostic medical health center to provide preventive medical care for about 25,000 clothing workers in Philadelphia. The project will be financed and operated jointly by the Philadelphia Clothing Manufacturers Association and the Amalgamated Clothing Workers of America, CIO. Funds to cover construction and equipment were accumulated over the last three years. The center, a two story building of steel and concrete, will occupy 45,000 square feet and will include reception and examination rooms, an auditorium for lectures and films on preventive medicine.

Pittsburgh

Huggins Memorial Lecture.—Dr. Andrew C. Ivy of the University of Illinois College of Medicine, Chicago, will deliver the R. R. Huggins Memorial Lecture of the University of Pittsburgh School of Medicine on November 18 at 8:30 p. m. at the Mellon Institute, Pittsburgh. This is the fourth in the series of annual lectures sponsored by Nu Chapter of the Phi Delta Epsilon Fraternity. The subject of Dr. Ivy's address will be "Medical Ethics, Democracy and Medical Care."

PUERTO RICO

American College of Physicians.—The first regional conference of the American College of Physicians was held at the Medical Association building in San Juan on October 16. Dr. Rafael Rodriguez-Molina is chairman of the local chapter. A number of medical physicians from United States and Latin American universities were present. The following doctors participated in the conference: Eduardo R. Pons, Mercedes Vicente de Torregrosa, Enrique Koppisch, José Oliver González, Hugh J. Morgan, Ramón M. Suárez, F. Hernández Morales, E. Pérez Santiago, Rurico S. Díaz Rivera, Antonio Ortiz and Roberto Feliciano.

Medical School to Open in 1950.—The School of Medicine of the University of Puerto Rico will start operations in August 1950, Jaime Benitez, rector of the University, announced on his return after a series of conferences with officials of Columbia University, New York. Several professors from the United States will teach at the new medical school in San Juan. Puerto Rican physicians will also be on the staff. The first year will start with fifty students. Columbia University granted Dr. Brown a leave of absence to take charge during this year as special assistant in charge of medical affairs of the University of Puerto Rico. The facilities of the Tropical School of Medicine and the University of Puerto Rico will be used to carry on this project.

Public Health Anniversaries Observed.—On August 12 Puerto Rico celebrated the twenty-fifth anniversary of the beginning of social work on the island and the sixth anniversary of the Insular Health Department's Division of Public Welfare. Central figure at the Jubilee was Miss Nellie Foster, who put social work on an active footing in Puerto Rico. She came to the island from Chicago in 1924 and became superintendent of the Insular Health Department's newly established Social Research Branch. After organizing activities, she left the island and did not return until invited to the jubilee as a guest of honor. Dr. Antonio Fernos Isern, San Juan, Puerto Rico's resident commissioner in Congress, was also honored at the ceremonies. Insular social work began during his term as assistant commissioner of health, and the public welfare service came into existence during his second term as health commissioner.

GENERAL

Clinical Research Society Meeting.—The twenty-second annual meeting of the Central Society for Clinical Research will be held in Chicago at the Drake Hotel November 4-5. Thirty-seven papers will be presented. There is no registration fee or charge for admission.

Grants for Ophthalmologic Research.—The National Council to Combat Blindness, which was established to finance and stimulate ophthalmologic research, is offering grants in aid to scientific investigators. Application forms, which should be in the office of the council by Feb. 15, 1950, may be obtained by addressing the Secretary, National Council to Combat Blindness, Inc., 1186 Broadway, New York 1.

Meeting of Military Surgeons.—The annual meeting of the Association of Military Surgeons of the United States will be held November 10-12 in the Hotel Statler, Washington, D. C. Active and inactive officers of the medical, dental, veterinary and medical services, nurses and women's specialty corps are cordially invited to attend. A program of forum lectures and panels will be presented by civilian and military authorities. A special program entirely devoted to the affairs of the reserve components will be conducted by reserve officers on November 12.

Drs. Graham and Alcock Honored.—Drs. Evarts A. Graham, St. Louis, and Nathaniel G. Alcock, Iowa City, were awarded a gold medal and a certificate, respectively, at the recent annual meeting of the Mississippi Valley Medical Society. Dr. Alphonse McMahon, president, presented the awards. Dr. Graham is professor of surgery and head of the department,

Washington University School of Medicine. He is a graduate of Rush Medical College, 1907, and is a past president of the American Association of Thoracic Surgeons, American Surgical Association and American College of Surgeons. Dr. Alcock has served for many years as professor and head of the department of urology at the State University of Iowa College of Medicine, Iowa City. He is a graduate of Northwestern University Medical School, 1912, and president of the Iowa State Medical Society.

Schering Fellowship Award.—Dr. D. Laurence Wilson of Kingston, Ontario, Canada, has been awarded the 1949 Schering Research Fellowship in Endocrinology, which carries with it a fund of $2,500. The award is presented through the Society for the Study of Internal Secretions. Dr. Wilson will pursue research work in metabolic and endocrine diseases, under the direction of Dr. George W. Thorn, Hersey Professor of Medicine at Harvard Medical School, Boston. Dr. Wilson is a graduate of Queen's University Faculty of Medicine, Kingston, 1944.

Joint Meeting at Albuquerque.—The Southwestern Medical Association Conference and the New Mexico Division of the American Cancer Society will meet November 9-12 at the Hilton Hotel, Albuquerque, N. Mex. Guest speakers include:

Elexious T. Bell, Minneapolis, Experimental Production of Cancer.
Kenneth D. A. Allen, Denver, Practical Consideration of Carcinoma of the Cervix Uteri.
Otto C. Brantigan, Baltimore, Carcinoma of the Lung.
William Boyd, Toronto, Canada, The Spread of Tumors.
Evans W. Pernokis, Chicago, Leukemia.
Herbert F. Traut, San Francisco, The Vaginal Smear in Gynecologic Diagnosis.
Elmer Belt, Los Angeles, Office Urology.
Herbert W. Meyer, New York, Diaphragmatic Hernia.
Donald M. Pillsbury, Philadelphia, Practical Management of Superficial Fungus Infections of the Skin.
William A. H. Rettberg, Denver, Indications for Antibiotics.
Allan M. Butler, Boston, Parenteral Fluid Therapy.

Any Doctor of Medicine is welcome to register and attend the sessions.

National Foundation for Eye Research.—An organization known as the National Foundation for Eye Research, founded in Washington, D. C., proposes to raise funds for ophthalmic research aimed at discovering the causes and developing more efficacious therapies for ocular diseases leading to blindness. The activities of the foundation will be limited entirely to supporting and establishing research centers for ophthalmology, leaving other approaches to the prevention of blindness and rehabilitation of the blind to existing agencies. Mr. George Swartz, well known for his promotion of other medical philanthropies, has been selected as national chairman. The allocation of funds for research purposes will be made on the advice of a Scientific Advisory Board, consisting of V. Everett Kinsey, Ph.D., Boston, chairman, Dr. Francis H. Adler, Philadelphia; Dr. Edwin B. Dunphy, Boston; Dr. Jonas S. Friedenwald, and Dr. Alan C. Woods, both of Baltimore. Members will be added to the board as the need for expansion arises.

New England Postgraduate Assembly.—This organization will hold its eighth annual meeting in the Copley Plaza Hotel, Boston, November 9-11, sponsored by the Medical Societies of Maine, New Hampshire, Vermont, Massachusetts, Rhode Island and Connecticut. Guest speakers will be:

T. Grier Miller, Philadelphia, The Patient Who Is Yellow.
Alvan L. Barach, New York, Medical Treatment of Bronchiectasis.
Cushman D. Haagensen, New York, Duty of the General Practitioner in the Diagnosis of Cancer.
O. Theron Clagett, Rochester, Minn., Surgical Aspects of Carcinoma of the Lung.
J. Lawrence Pool, New York, Neurosurgical Relief of Intractable Pain.
Louis B. Jaques, Ph.D., Saskatoon, Saskatchewan, Canada, Anticoagulant Therapy.
Warren H. Cole, Chicago, Diagnosis and Therapeutic Considerations of Abdominal Pain.
R. Gordon Douglas, New York, Amenorrhea and Nonmenstrual Bleeding.
John E. Dees, Durham, N. C., Congenital Anomalies of the Upper Urinary Tract.
Homer W. Smith, Sc.D., New York, Physiologic Aspects of Hypertension.
T. Campbell Thompson, New York, Arthritis; Orthopedic Aspects.
Theodore E. Woodward, Baltimore, Therapeutic Results with Aureomycin and Chloramphenicol.
Esther L. Richards, Baltimore, Emotional Problems and Behavior in Childhood.
T. McNair Scott, Philadelphia, Virus Infection in Infancy and Childhood.
Joseph H. Burchenal, New York, Chemotherapy of Neoplastic Disease.
Richard H. Freyberg, New York, Clinical Aspects with Cortisone, Adrenocorticotropic Hormone and Other Steroids in Rheumatic Disease.

Medical students, interns, residents and full time research fellows are invited as guests at the scientific sessions. The registration fee is $2. Registration and reservations for the dinner and jamboree should be made by mail in advance.

Prevalence of Poliomyelitis.—Reports of cases of poliomyelitis for the periods indicated have been received from the National Office of Vital Statistics, U. S. Public Health Service.

Division and State	Week Ended Oct. 22, 1949	Week Ended Oct. 23, 1948	Median, 1944-1948	Jan. 1 to Oct. 22, 1949	Jan. 1 to Oct. 23, 1948
New England States					
Maine	10	..	..	429	37
New Hampshire	1	..	1	176	16
Vermont	3	..	2	125	20
Massachusetts	51	4	27	1,489	175
Rhode Island	5	1	1	145	9
Connecticut	17	5	12	541	107
Middle Atlantic States					
New York	128	55	63	4,970	1,396
New Jersey	58	32	26	1,598	640
Pennsylvania	96	33	33	695	644
East North Central States					
Ohio	52	22	49	1,674	1,040
Indiana	22	6	6	1,019	340
Illinois	61	41	41	2,652	992
Michigan	67	39	23	2,521*	610
Wisconsin	43	47	47	947	397
West North Central States					
Minnesota	40	72	28	1,716	1,098
Iowa	15	79	18	1,021	975
Missouri	50	7	13	1,253	283
North Dakota	9	3	..	427	118
South Dakota	7	121	10	340	468
Nebraska	24	29	6	569	450
Kansas	23	12	12	688	283
South Atlantic States					
Delaware	4	3	3	42	126
Maryland	14	7	7	213	96
District of Columbia	3	5	4	92	117
Virginia	13	18	9	297	369
West Virginia	7	10	10	322	149
North Carolina	6	42	13	213	2,313
South Carolina	..	6	3	97	344
Georgia	10	11	10	192*	212
Florida	3	6	9	120	237
East South Central States					
Kentucky	18	3	3	573	101
Tennessee	15	13	8	479	344
Alabama	1	9	3	222	198
Mississippi	9	3	3	311	143
West South Central States					
Arkansas	22	3	3	924*	133
Louisiana	5	1	3	213	134
Oklahoma	31	3	3	1,103	226
Texas	57	28	18	2,068	1,580
Mountain States					
Montana	5	..	1	85	60
Idaho	10	2	3	420	100
Wyoming	2	3	..	103	71
Colorado	13	5	3	305	107
New Mexico	9	1	1	197	70
Arizona	1	12	1	142	125
Utah	22	13	5	237	89
Nevada	..	1	..	15	7
Pacific States					
Washington	18	21	15	524	280
Oregon	15	12	6	251	152
California	98	206	60	2,867	3,802
Total	1,148	1,078	...	37,087*	22,588
Median, 1944-1948	....	.....	722	14,856	

* Deductions: Arkansas, 1 case week ended October 1; Michigan, 1 case week ended September 3 and 1 case week ended September 24; Georgia, 1 case week ended October 1.

CORRECTION

Tonsillectomy During Epidemic Poliomyelitis.—In a letter to the editor under this title in THE JOURNAL October 22, page 548, in the third paragraph, sixth line, the words "in 1946 are correct" should read "in 1946 are incorrect."

University Names Four Department Heads.—Under New York City news in THE JOURNAL October 8, page 400, the information concerning Drs. Thomas Kirwin and Sprague Carleton should refer to their appointment in the Department of Urology in each instance, and not to the Department of Neurology as was stated in the item.

Marriages

JOHN R. FINLAY, Yorktown Heights, N. Y., to Dr. VERA E. MILANICK of Frackville, Pa., August 8.

PAUL S. BLAKE, Minneapolis, to Miss Patricia Louise Breher of Wadena, Minn., August 29.

JACK P. MERCER, Toledo, Ohio, to Miss Carolyn Johnson of Eaton, August 20.

Deaths

William David McFee ● Haverhill, Mass.; born in St. John, New Brunswick, Canada, Oct. 13, 1874; University of Vermont College of Medicine, Burlington, 1897; past president of the American Academy of Physical Therapy; formerly secretary of the New England Society of Physical Medicine; in 1928 represented this country in Stockholm, Sweden, at the International Congress of Radiology and Physiotherapy; served as a major in the medical corps of the U. S. Army during World War I; later director of physical therapy at the Walter Reed General Hospital in Washington, D. C.; served as mayor and city physician; affiliated with the Haverhill Municipal Hospital; died September 6, aged 74, of bronchopneumonia.

Samuel J. Morris ● Colonel, U. S. Army, retired, Chevy Chase, Md.; born April 23, 1877; Columbian University Medical Department, Washington, D. C., 1901; fellow of the American College of Surgeons; entered the U. S. Army as an assistant surgeon in 1902; served during World War I; during his army career served at many stations in this country and abroad, including the Philippine Islands and the Panama Canal Zone; at one time stationed at the Headquarters Eighth Corps Area, Fort Sam Houston, Texas; promoted through the various ranks and in 1928 became a colonel; retired July 31, 1940; died at Fort Jay on Governors Island, N. Y., September 1, aged 72.

Walter Edward Camp ● Minneapolis; born in Springfield, Mo., Sept. 21, 1889; University of Minnesota Medical School, Minneapolis, 1915; clinical assistant professor of ophthalmology and otolaryngology at his alma mater and clinical assistant professor of ophthalmology at the University of Minnesota Graduate School; specialist certified by the American Board of Otolaryngology; member of the American Academy of Ophthalmology and Otolaryngology; affiliated with the Abbott Hospital, Minnesota General Hospital and Northwestern Hospital, where he died September 5, aged 59, of carcinoma of the esophagus.

Robert Leonard Mason ● Wellesley Hills, Mass.; Harvard Medical School, Boston, 1922; specialist certified by the American Board of Surgery; fellow of the American College of Surgeons; veteran of World Wars I and II; affiliated with the Marlborough Hospital, Marlboro, Cambridge City (Mass.) Hospital, Faulkner Hospital, New England Baptist Hospital, Massachusetts Woman's Hospital and Robert Breck Brigham Hospital, all in Boston, Community Memorial Hospital, Ayer, and the Emerson Hospital, Concord; author of "Pre-operative and Post-Operative Treatment"; died September 21, aged 52, of cerebral hemorrhage.

Thomas Lee Adams, Calmer, Ark. (licensed in Arkansas in 1906); died in the Davis Hospital, Pine Bluff, August 16, aged 76.

Walter Levi Bates, Greenville, S. C.; Vanderbilt University School of Medicine, Nashville, 1919; member of the American Medical Association; affiliated with Greenville General Hospital and St. Francis Hospital; died August 11, aged 58, of heart disease.

Hugh C. Chance ● Cumberland Gap, Tenn.; University of Tennessee Medical Department, Nashville, 1893; member of the Kentucky State Medical Association and the Radiological Society of North America; died August 14, aged 76.

John Ralph Cooper, Engadine, Mich.; Kentucky School of Medicine, Louisville, 1903; member of the Kentucky State Medical Association and the American Medical Association; past president of the Boyd County (Ky.) Medical Society; died in Petoskey in August, aged 67.

Martha Louise Pomeroy Sanderson Cottrell, Walled Lake, Mich.; College of Medical Evangelists, Los Angeles, 1922; member of the American Medical Association; died in July, aged 52.

Joseph Marvin Feder ● Lake City, Fla.; Kansas City (Mo.) College of Medicine and Surgery, 1920; served during World War I; life honorary member of Anderson County Memorial Hospital in Anderson, S. C.; chief of pathology, the Veterans Administration Hospital; died August 25, aged 57.

Franklin Ernest Hall ● Chicago; Karl-Franzens-Universität Medizinische Fakultät, Graz, Germany, 1919; specialist certified by the American Board of Surgery; affiliated with the Henrotin and Grant hospitals; died October 4, aged 54.

● Indicates "Fellow" of the American Medical Association.

Harold Alonzo Hume ● Owosso, Mich.; Detroit College of Medicine, 1909; fellow of the American College of Surgeons; member of the American Association of Industrial Physicians and Surgeons; on the staff of the Memorial Hospital; died August 18, aged 64, of coronary occlusion.

Kromer Columbus Ice, La Habra, Calif.; St. Louis College of Physicians and Surgeons, 1903; served during World War I; died August 26, aged 73, of heart disease, following an operation for gallstones.

John William Ildza, Pittsburgh; Medico-Chirurgical College of Philadelphia, 1915; Temple University School of Medicine, Philadelphia, 1918; member of the American Medical Association; affiliated with Suburban General Hospital in Bellevue and St. Johns General Hospital; died August 27, aged 71, of coronary occlusion.

John G. Jennette, Pauls Valley, Okla.; Memphis (Tenn.) Hospital Medical College, 1888; died in Terrell, Texas, July 19, aged 92, of senility.

Rudolph Fred Patton ● Des Moines; State University of Iowa College of Medicine, Iowa City, 1926; affiliated with the Veterans Administration Center; died August 24, aged 47.

James William Proctor, Tenafly, N. J.; University of the City of New York Medical Department, 1888; member of the American Medical Association; fellow of the American College of Surgeons; past president of the Bergen County Medical Society; served on the Englewood (N. J.) Hospital; died August 26, aged 86, of arteriosclerotic heart disease.

Henry Ashton Robinson, Hingham, Mass.; Harvard Medical School, Boston, 1911; member of the American Medical Association; served during World War I; member of the New England Pediatric Society; for many years school physician; died August 21, aged 62, of acute coronary occlusion.

Ralph William Schaeffer, Redondo Beach, Calif.; Cornell University Medical College, New York, 1921; member of the American Medical Association; fellow of the International College of Surgeons; affiliated with the Jared Sidney Torrance Memorial Hospital, Torrance; died August 3, aged 59, of sarcoma.

John Arthur Spengler, Geneva, N. Y.; University of Buffalo School of Medicine, 1899; specialist certified by the American Board of Ophthalmology; member of the American Academy of Ophthalmology and Otolaryngology and the American Medical Association; fellow of the American College of Surgeons; affiliated with the Geneva General Hospital; ophthalmologist for the Lehigh Valley and New York Central Railroads; died August 12, aged 81, of cerebral hemorrhage.

John Walter Torbett Sr., ● Marlin, Texas; Atlanta Medical College, 1895; specialist certified by the American Board of Internal Medicine; life member of the American College of Physicians; affiliated with the Torbett Clinic and Hospital; for many years chairman of the board of directors of the Methodist Orphans Home, Waco; a director of the Marlin National Bank; died August 9, aged 78, of coronary occlusion.

Robert T. Upchurch, Henderson, N. C.; Jefferson Medical College of Philadelphia, 1908; member of the American Medical Association; for many years active member of the Vance County Board of Health and at one time county health officer; medical director of the Maria Parham Hospital; died August 4, aged 68, of dissecting abdominal aneurysm.

Henry Harrison Vaupell, Oak Park, Ill.; Rush Medical College, Chicago, 1897; College of Medicine and Surgery (Physio-Medical) Chicago, 1905; died August 30, aged 73, of coronary occlusion.

William Joseph Walsh Jr., ● Philadelphia; Jefferson Medical College of Philadelphia, 1927; on the staff of St. Mary's Hospital, where he died August 12, aged 46, of brain tumor.

John Malcolm Weber, Philadelphia; Jefferson Medical College of Philadelphia, 1917; served during World War I; died in Lankenau Hospital August 16, aged 58, of adenocarcinoma of stomach.

Abraham Joseph Weinberg ● Chicago; Rush Medical College, Chicago, 1920; certified by the National Board of Medical Examiners; served during World War I; died in the Belmont Community Hospital August 7, aged 53, of melanosarcoma of the jaw with metastasis to the liver and lungs.

Edward Bates Wren, Talladega, Ala.; Medical College of Alabama, Mobile, 1890; member of the American Medical Association; formerly member of the city commission and county board of health; on the staff of Citizens' Hospital; died August 12, aged 87, of Parkinson's disease.

Foreign Letters

PARIS

(From Our Regular Correspondent)

Sept. 20, 1949.

International Anticancer Union

The general meeting of the Board of Directors of the International Anticancer Union took place in Paris July 18 to 22. Delegates of thirty-six nations were present. Prof. J. Maisin, secretary-general, and Professor Le Lorier, assistant secretary-general, read reports on the activity of the union and presented future plans. After discussion, the general meeting passed resolutions relating to modification of the Union statutes, universally standard statistics, constitution of continental standardized iconography, constitution of a standard nomenclature (lexicon), organization of "cancer week" and issuance of a postal stamp, other financial propaganda resources, coordination of efforts within the scope of the research and social fight against cancer, help for the anticancer equipment of devastated countries, creation of continental or regional union offices, and issuance of a bulletin insuring rapid and periodic transmission of information of universal interest. The program of the Fifth International Congress for the Scientific Research and Social Fight Against Cancer, which is to take place in Paris in 1950, has been discussed, and the agenda will be published later. Jointly with this general meeting there took place the meeting of the International Cancer Research Commission, which became a part of the International Anticancer Union, according to decisions made at the Fourth St. Louis International Congress, of 1947. This commission is now the Scientific Council of the Union. At one of its last meetings, the following resolution was passed: "The duties of the International Research Commission are to advance research on cancer by (1) serving as the Scientific Council of the Union; (2) pooling information at annual meetings and on specific topics at special small meetings; (3) obtaining agreement on cancer nomenclature through the publication of atlases and other means; (4) giving advice in the planning of cancer research when asked; (5) helping secure equipment and supplies when asked; (6) promoting studies on the environmental, occupational and geographic incidence of cancer, especially as initiated through cooperation of the members; (7) maintaining a registry of cancer research institutions, equipment and workers, and (8) facilitating adequate review of the cancer literature."

The next meeting of the Board of Directors and of the Scientific Council of the International Anticancer Union will take place at the fifth congress, in 1950.

Heparin Therapy of Acute Articular Rheumatism and Exudative Processes

E. Donzelot, H. Kaufmann, E. Chartrain and J. Nory in March (Broussais Hospital) reported an acute articular rheumatism improved in a spectacular manner with heparin therapy. The patient was a 25 year old woman suffering for two months from a rheumatismal bout with a temperature ranging between 38 C. and 39 C. (100.4 and 102.2 F.) and with intense generalized arthralgia. After failure with the usual therapy, the authors tried an intravenous perfusion of 1 liter of isotonic sodium chloride solution with 150 mg. of heparin for three days (the coagulation time remaining 9 minutes). On the fourth and fifth days 300 mg. of heparin were injected (the coagulation time rose to 23 and 33 minutes). Pains (that had increased at the start) disappeared when the dose of 300 mg. per day was attained. The patients, immobilized the previous day by arthralgia, awakened free of symptoms. The temperature fell to 37 C. (98.6 F.) on the fourth day. Since then Donzelot and Kaufmann have treated 2 additional patients with similar success. One patient suffering from articular rheumatism for two months, responded to the administration of heparin with prompt disappearance of the arthralgia, and later of the fever. The other patient had malignant rheumatismal pancarditis, with bilateral hydrarthrosis and temperature rising above 39 C. (102 F.). There was a pericardial friction sound of exceptional extension and intensity; roentgenography showed an increase of the dimensions of the heart and pronounced pulmonary stasis. The patient was in a deep torpor, and the disease seemed to have reached the terminal phase. The intravenous perfusion of heparin caused the disappearance of pains on the following day; torpor diminished after three days, the temperature fell to 37.5 C. (101.3 F.), and within forty-eight hours the signs of pericarditis disappeared, the radiologic image of the heart regressed and the pulmonary overcharge disappeared. Four days after the institution of perfusion the appetite had returned and hydrarthrosis was resorbed. These symptoms reappeared to lesser degree after the discontinuation of the treatment, but were definitely halted by the third perfusion. The authors believe that the action of heparin on pericardiac and articular exudates and on torpor and arthralgia are due to a single mechanism acting on the protein balance through a modification of osmosis. With this method, the authors have controlled the action of heparin in other exudative processes. For example, in a case of tuberculous acute serofibrinous pleurisy, heparin was given in discontinuous intravenous injections of 300 mg. (three injections of 100 mg. per twenty-four hours). Dyspnea was almost immediately alleviated, and the discharge rapidly resorbed during the following days. At the July 8 meeting of the Medical Society of the Paris hospitals, Donzelot and Kaufmann stressed that heparin can be considered a weapon for the treatment of acute articular rheumatism and that as regards other exudative processes its action deserves further study.

Researches for the Increasing of Immunity

G. Ramon, R. Richou, J. P. Thiery and C. Gerbeaux have made a comparative study of the influence of various substances stimulating the increase of immunity by injecting in rabbits purified tetanus antitoxin alone or with a mixture of suspensions of Bacterium abortus, transformed with a solution of formaldehyde in wood alcohol and water and with heat in a vaccine or with latex or alum. After the first injection, the value of antitoxic immunity corresponded to $\frac{1}{500}$ unit when anatoxin was used alone and to ½ and ⅕ unit with a mixture of latex or alum, but, when anavaccines of Bact. abortus were added, this value reached ½, 1 and 3 units. Adding a bacterial suspension stimulates, therefore, an increase in immunity, which reaches a level almost 1,000 times higher than the level obtained with anatoxin alone. This addition offers the advantage of bringing about by itself a specific immunity. In their communication to the Academy of Sciences, the authors emphasized that, in addition to their practical value, these researches permit the study of the phenomena that influence the degree of immunity; they are pursuing their research particularly on the constitution of microbes and the responsibility for the increase.

Crystallized Clitocybine

Prof. A. Ch. Hollande (Montpellier), who discovered the effect of clitocybine on Bacillus tuberculosis, reported to the Academy of Sciences on May 30, 1949, that he had succeeded in extracting, by means of various solvents, pure clitocybine from Clitocybe gigantea and its culture mycelium and to have crystallized it. The crystals, which are of various forms, are soluble in water, sulfuric ether and ethyl alcohol; in the presence of moisture they oxidize readily, becoming ochreous in color. With respect to B. tuberculosis, clitocybine crystals in aqueous solution are bacteriostatic and bacteriolytic, these properties disappearing when the solution is heated to 100 C. Some

crystals, when placed on the surface of a Petri dish containing a forty-eight hour opalescent culture of human tuberculous bacilli, effect in twenty-four to forty-eight hours, at 37 C., a clear aureola, a sign of bacteriolysis. The author stresses that crystallized clitocybine is not toxic; the subcutaneous injection of 0.02 Gm. aqueous solution to a 350 Gm. guinea pig does not cause local necrosis or the death of the animal. Clitocybine is not a protein; its chemical nature is being studied.

Influence of the Teeth on the Evolution of Certain Endocrine Disorders

During roentgenographic examinations of the skull in certain endocrine disorders, especially those with hypophyseal or thyroid disorders, J. A. Huet noted the frequency of morphologic modifications of the teeth and has undertaken systematic research on all such patients. At a meeting of the Medico-Surgical Society of Private Hospitals, he presented a series of roentgenograms showing the coincidence of disorders of dental migration, especially of the superior wisdom tooth, with endocrine disorders. The author pointed also to the existence of infectious lesions of dental origin in a large number of cases of infectious thyroiditis. He recommended systematic roentgenographic study of the skull of all patients with endocrine disorders of thyroid or hypophyseal origin, and referring the patients to a dental surgeon if they failed to respond to endocrine therapy.

New Treatment of Masculine Seborrheal Alopecia

Sabouraud emphasized the influence of sex hormones in alopecia seborrheica but probably overestimated the microbial factor. He stated that the condition does not occur in eunuchs and that the usual onset is in young men with full sex function; the baldness is the sign of a superabundance of male hormones. The disease is moderate in women, ceases during pregnancy (accompanied with hyperfolliculinemia) and reappears within three months after delivery.

COLOMBIA

(From Our Regular Correspondent)

Sept. 30, 1949.

Social Insurance

A system of social insurance was recently established in Colombia for the first time. It is in charge of the Instituto Colombiano de Seguros Sociales, which was opened in Bogotá on September 26. The social insurance will cover the expenses of nonoccupational diseases and of maternity. The Colombian medical profession, because of experience in other Latin American countries, moved in professional solidarity to preserve their individual freedom. This professional movement resulted in the acceptance of an agreement between the Board of Directors of the Institute of Social Insurance and the presidents of the Medical Federation of Colombia and of the various scientific societies of Bogotá. The agreement is of great value in adjusting the aims of the medical profession to the problems created by social insurance. This accomplishment has not yet been secured by professionals in some other countries.

The main points in the agreement are: 1. Specialists are not employees of social insurance service, but are registered as doctors in accordance with the listing by several scientific and medical associations and societies. The patients are to be sent to their proper offices. 2. Specialists are divided into two classes: (*a*) those appointed to social insurance services and (*b*) those who are not and who compose the supernumerary group. The specialists appointed to the social insurance services will accept the minimal fees for operations they perform, as the fees will be determined by the institute. Supernumerary specialists do not give their services under these conditions. They act as a moral and scientific support for those who are appointed. The classification is to be made by the respective scientific society. Insured patients are free to select the surgeon they want for operations, who will be paid by the Institute of Insurance, according to its schedule of fees, the balance to be paid by the patient. 3. The patient is free to select the physician he wants, either appointed or supernumerary. 4. Surgeons and obstetricians are limited to a certain maximum number of operations every month, to prevent excessive work for a given group. 5. There will be general physicians for consultations, who will work as employees of the institute with a fixed salary, based on two hours of work a day. The directors of the institute will select doctors from the lists given them by scientific associations. Consultations will not exceed three per hour for each physician. Consultant physicians will not appear in the lists of specialists, either appointed or supernumerary. 6. The medical profession petitioned the Congress to restrict medical care under social insurance to persons in poor economic circumstances. The medical body of Bogotá was solidly united in petitioning for the aforementioned agreement. The social insurance program, which covers 55,000 insured persons in the capital of the republic, began its services with 60 physicians.

Human Infection with Trypanosoma Rangeli

Drs. Raúl Paredes Manrique and Cecilia Hernández de Paredes of the Department of Clinical Laboratory reported a case of infestation with Trypanosoma rangeli before the Academia Nacional de Medicina. This is the first case reported in a human being in Colombia and the second mentioned in the literature. The first case in the literature was reported by Dr. Felix Pifano of Venezuela. The patient, 35 years of age, complained of occasional recurrent fever. He had hepatomegaly, splenomegaly, anemia, transient malleolar edema, insomnia and acute osteomuscular pain. The results of laboratory examination showed accelerated sedimentation of the erythrocytes, leukocytosis and lymphocytosis. Clinical cure was obtained after administration of chloroquine diphosphate. The disease lasted from Nov. 1, 1947 to Sept. 13, 1948.

Trypanosoma rangeli tejera was isolated from the blood of the patient. The presence of flagella in the blood was verified by blood cultures. The results were positive even after clinical improvement. The cultures became sterile after the patient was given antimony preparations.

The authors conducted experimental studies of Trypanosoma organisms by use of cultures, xenodiagnoses and inoculations. Leishmania, Leptomona and Crithidia were not encountered in the blood and viscera of the experimental animals, but all forms of Trypanosoma flagella were encountered in the cultures and xenodiagnoses.

The pathogenetic role of Tr. rangeli in the case reported by the authors seem to have been proved by the fact that no other infection was present and by the positive results obtained from experimental inoculation in several animals, although the disease could not be reproduced.

Institution of Mental Hygiene

Dr. Pierre C. Simonart of the University of Pennsylvania was recently invited to lecture at the universities of Colombia. He gave a short course on physiopathology of emotion at the Universidad de los Andes, which was recently opened, and also several lectures in the universities and academies of Bogotá. Much enthusiasm on the subject of mental hygiene resulted from these lectures among scientific and social circles. An Institute of Mental Hygiene will be established with the collaboration of the Universidad de los Andes and the Neuropsychiatric Institute of Pennsylvania and with donations from the Colombian philanthropists. Donations in one week reached 150,000 Colombian pesos.

Correspondence

TOXIC EFFECTS OF ESTROGENS

To the Editor:—J. A., a white man aged 29, was referred to me by a chemical concern for a painful enlargement of the right breast. I noted, also, a beginning enlargement and congestion of the left breast. These symptoms had been present for the past month and had been getting worse. Other symptoms were: dryness of the mouth, diminished growth of facial hair, requiring less frequent shaving, and itching of the back of the neck and chest. The patient had been working with synthetic estrogens for the previous five months, handling the material during one of the stages of manufacture. The physical examination revealed an enlargement of the right breast with a pancake mass under the nipple; there was also a slight enlargement of the left breast. Both nipples showed deep pigmentation, unusual in the male. There was no disturbance in sex function. The patient is the father of two small children. A diagnosis of percutaneous estrogen absorption was made. The patient was removed from contact with estrogen compounds, and testosterone propionate, 25 mg. twice weekly, was administered for three weeks. At the end of the three weeks all the aforementioned symptoms disappeared. The right breast shrank to normal, but a small pancake mass was still felt in the left breast. The pigmentation of the nipples lessened considerably. The normal growth of facial hair returned, and the dryness and itching of the skin disappeared. Although no estrogen assay was made, the pathogenesis of the condition was well established by the history of contact and by the recovery as soon as the contact with estrogenic material had ceased.

RITA S. FINKLER, M.D., Newark, N. J.

PSYCHOSOMATIC SYMPTOMS

To the Editor:—A. I. Josey describes in his article "Headache Associated with Pathologic Changes in Cervical Part of Spine" (J. A. M. A. 140:944 [July 16] 1949) what appears to be a new syndrome. However, as is the case many syndromes which attempt to unite structures of the same composition (muscles, skin and the like) but unrelated to each other as far as their innervation is concerned and in which no apparent cause can be discovered, one often finds after a careful psychiatric history an emotional maladjustment with somatic conversions.

The physiologic basis for the loss of lordosis in the cervical part of the spine is accounted for by a tonic contraction of certain posterior neck muscles (splenii capitis, cervicalis ascendens, semispinalis colli, supraspinalis and interspinalis). This tonic contraction is usually associated with similar changes in the occipitofrontalis, the masticatory and the lower portion of erector spinae muscles. The somatic symptoms presented by such patients are obvious: cervical and frontal pain and low backache. These muscular aches are readily found in compulsion neurosis and to some extent in psychasthenia. Psychologically they represent the patient's vain attempt to keep "his head above water," "to keep his chin up or a stiff upper lip" or "to grit his teeth in the face of insurmountable difficulties."

These patients can be characterized as stiff personalities, unbending and uncompromising. Typical is the picture of the patient sitting erect on the edge of the examining chair, the palms of his hands resting on his thighs and the chin up with an attitude of defiance. He has lost faith in medicine after many years of suffering and innumerable treatments, yet he keeps on returning in the hope that a new miracle drug will relieve his pain. A thorough psychiatric history will not only reveal the conflict but enable the patient to unburden himself of the unpleasant material.

A. D. JONAS, M.D., New York.

PERIODIC DISEASE

To the Editor:—Reimann's paper on "Periodic Disease" in THE JOURNAL, Sept. 17, 1949, suggests relationships among conditions previously described as distinct entities. In support of this concept, I should like to cite my own experience in 16 cases of benign paroxysmal peritonitis. Three patients had intermittent arthralgia, at times with joint swelling, as an alternative form of attack appearing between their major abdominal crises. Two patients had urticaria, although only in the earlier years of their illness. One patient had on rare occasions an episode of fever without abdominal pain. In none of the 16 cases was there purpura, angioneurotic edema, periodic paralysis or neutropenia.

I am not in accord with Reimann's designation of benign paroxysmal peritonitis as "periodic abdominalgia." This term, which signifies merely recurrent abdominal pain, does not in any sense describe the remarkable clinical picture of the paroxysms of the disease. They are characterized not only by intense abdominal pain, fever, chills, leukocytosis and polymorphonucleosis but also by the presence of striking abdominal findings indicative of peritoneal irritation. The direct and rebound tenderness and the abdominal wall spasm are often of such degree as to invite emergency operation. These findings taken together set this disease sharply apart from the commoner, milder, functional forms of abdominal pain.

With respect to the term "peritonitis," with which Reimann appears to be in disagreement, in addition to the hyperemia and edema of the peritoneum which were noted in my first paper, there may be actual peritoneal fluid or exudate present. In 1 case, which I reported more recently, there were "scattered deposits of fibrin-like material" (Benign Paroxysmal Peritonitis, *Gastroenterology* 12:234 [Feb.] 1949). In 1 case, as yet unreported, stringy fibrinous exudate was present in the peritoneal cavity. Microscopic examination of the peritoneum and omentum revealed acute purulent inflammation. Cultures were sterile, and results of complete exploration were otherwise negative. In Reimann's own series, 1 patient (case 10) was found at operation to have "peritoneal adhesions and free peritoneal fluid, suggesting a chronic form of peritonitis." In my opinion, the vascular responses and the polymorphonuclear exudate together comprise an inflammatory reaction of the peritoneum which justifies the term peritonitis.

Reimann's observations should emphasize the fact that fever may occur in the absence of infection. Perhaps even more important, they should attract medical attention to a group of disabling paroxysmal disorders which can last a lifetime.

SHEPPARD SIEGAL, M.D., New York.

FOREIGN BODY IN BREAST

To the Editor:—The clinical note, "Foreign Body in Breast," in THE JOURNAL, Sept. 10, 1949, reminds me of a case in my practice many years ago. The patient, age about 65, mother of several children, called me to her home because of an abscess in her right breast which was pointing about 1 inch (2.5 cm.) below the nipple. The breast was large and flabby. The induration was not over ½ inch (1 cm.) in diameter but extended deep into the breast. There were no enlarged nodes in either breast or in the axillary spaces. When the histoury entered the abscess a hard object was felt, and, after the pus was evacuated, a forceps was introduced and a needle 1¼ inches (3 cm.) long was extracted point foremost. The patient denied ever having had a needle pierce her breast but did say that many years previously she swallowed a needle about this size.

J. M. POSTELLE, M.D., Oklahoma City.

Medical Examinations and Licensure

COMING EXAMINATIONS AND MEETINGS

NATIONAL BOARD OF MEDICAL EXAMINERS

NATIONAL BOARD OF MEDICAL EXAMINERS. *Part III.* Boston, Chicago and New York, January. *Parts I and II,* Feb. 13-15. Centers where there are approved medical schools and five or more candidates. Exec. Sec., Mr. E. S. Elwood, 225 S. 15th Street, Philadelphia 2.

EXAMINING BOARDS IN SPECIALTIES

AMERICAN BOARD OF NEUROLOGICAL SURGERY: *Oral,* Chicago, June 3. Final date for filing applications is Jan. 1. Sec., Dr. W. J. German, 789 Howard Ave., New Haven.

AMERICAN BOARD OF OBSTETRICS AND GYNECOLOGY, Inc. *Written and Reviews of Case Histories. Part I.* Various Centers. Feb. 3. Sec., Dr. Paul Titus, 1015 Highland Bldg., Pittsburgh.

AMERICAN BOARD OF OPHTHALMOLOGY: Boston, April. Sec. Dr. Edwin B. Dunphy, 56 Ivie Rd., Cape Cottage, Maine.

AMERICAN BOARD OF ORTHOPAEDIC SURGERY. *Part II,* New York City, Feb. 9-10. Sec. Treas., Dr. Harold A. Sofield, Room 1856, 122 S. Michigan Ave., Chicago.

AMERICAN BOARD OF PLASTIC SURGERY: Examinations are given in June and November of each year in the home town of applicants. Sec. Treas., Dr. Louis T. Byars, 400 Metropolitan Bldg., St. Louis, Mo.

AMERICAN BOARD OF PROCTOLOGY: *Examination in Anorectal Surgery,* Philadelphia, Nov. 12. Sec.-Gen., Dr. Louis A. Buie, 102-110 Second Ave., S.W., Rochester, Minn.

AMERICAN BOARD OF UROLOGY: *Written.* Various Centers, Dec. 3. *Oral and Clinical,* Chicago, Feb. 11-15. Sec., Dr. Harry Culver, 7935 Sunnyside Road, Minneapolis 21.

BOARDS OF MEDICAL EXAMINERS

ALABAMA: *Examination.* Montgomery, June 27-29. Sec., Dr. D. G. Gill, 519 Dexter Avenue, Montgomery.

COLORADO: * Denver, Jan. 3-6. Sec., Dr. George H. Gillen, 831 Republic Building, Denver.

CONNECTICUT: * *Examination.* Hartford, Nov. 8-9. Secretary to the Board, Dr. Creighton Barker, 160 St. Ronan Street, New Haven. *Homeopathic.* Derby, Nov. 8-9. Sec., Dr. Donald A. Davis, 38 Elizabeth St., Derby.

DELAWARE: *Examination.* Dover, Jan. 10-12. *Reciprocity.* Dover, Jan. 19. Sec., Dr. J. S. McDaniel, 229 State Street, Dover.

DISTRICT OF COLUMBIA: * *Examination.* Washington, Nov. 14-15. Sec., Mr. Paul C. Foley, Admin. Asst., 4130 E. Municipal Bldg., Washington.

FLORIDA: * *Examination.* Jacksonville, Nov. 27-29. Sec., Dr. Frank D. Gray, 12 N. Rosalind Ave., Orlando.

GUAM: *Endorsement.* Agana, Last Friday of each month. Sec., Capt. C. K. Youngkin, Dept. of Public Health, Guam, % F.P.O., San Francisco.

HAWAII: *Examination.* Honolulu, Jan. 9-12. Sec., Dr. I. L. Tilden, 881 S. Hotel St., Honolulu.

IDAHO: Boise, Jan. 9. Exec. Sec., Mr. Armand L. Bird, 305 Sun Building, Boise.

INDIANA: *Examination,* Indianapolis, June. Sec., Dr. Paul R. Tindall, 1138 K. of P. Bldg., Indianapolis.

IOWA: * *Examination.* Des Moines, Dec. 5-7. *Reciprocity.* Des Moines, Nov. 7, Dec. 5. Sec., Dr. M. A. Royal, 506 Fleming Bldg., Des Moines.

KANSAS: Topeka, Dec. 8-9. Sec., Dr. J. F. Hassig, 903 N. Seventh St., Kansas City.

KENTUCKY: Louisville, Dec. 12-14. Sec., Dr. Bruce Underwood, 620 South Third Street, Louisville 2.

LOUISIANA: New Orleans, Dec. 8-10. Sec., Dr. Roy B. Harrison, 1307 Hibernia Bank Building, New Orleans 12.

MAINE: Portland, Nov. 8-9. Sec., Dr. Adam P. Leighton, 192 State Street, Portland.

MARYLAND: *Examination,* Baltimore, Dec. 13-16. Sec., Dr. Lewis P. Gundry, 1215 Cathedral St., Baltimore 1. *Homeopathic. Examination,* Baltimore, Dec. 13-14. Sec., Dr. John A. Evans, 612 West 40th St., Baltimore.

MASSACHUSETTS: Boston, Nov. 13-18. Sec., Dr. George L. Schadt, 413 East State House, Boston.

MISSISSIPPI: *Reciprocity.* Jackson, December. Sec., Dr. Felix J. Underwood, State Board of Health, Jackson 113.

NEVADA: Carson City, Nov. 7. Sec., Dr. George H. Ross, 112 N. Curry St., Carson City.

NEW HAMPSHIRE: Concord, March 8-9. Sec., Dr. John S. Wheeler, 107 State House, Concord.

NORTH DAKOTA: *Examination,* Grand Forks, Jan. 4-6. *Reciprocity,* Jan. 7. Sec., Dr. C. J. Ghapel, Grafton.

OHIO: *Examination,* Columbus, Dec. 12-14. Sec., Dr. H. M. Platter, 21 W. Broad St., Columbus.

OKLAHOMA: * *Examination,* Oklahoma City, June 7-8. Sec., Dr. Clinton Gallaher, 813 Braniff Building, Oklahoma City.

OREGON: * *Examination,* Portland, January. Exec. Sec., Mr. Howard I. Bobbitt, 608 Failing Building, Portland 4.

PENNSYLVANIA: *Examination,* Philadelphia or Harrisburg, January. Acting Sec., Mrs. Marguerite G. Steiner, 351 Education Building, Harrisburg.

PUERTO RICO: *Examination.* Santurce, March 7. Sec., Mr. Luis Cueto Coll, Box 3717, Santurce.

SOUTH CAROLINA: *Examination,* Columbia, Nov. 8-9. *Reciprocity,* First Monday of every month. Sec., Dr. N. B. Heyward, 1329 Blanding St., Columbia.

SOUTH DAKOTA: * Sioux Falls, Jan. 17. Sec., Dr. C. E. Sherwood, 300 First National Bank Building, Sioux Falls.

UTAH. *Examination,* Salt Lake City, June. Dir., Dr. Frank E. Lees, 324 State Capitol Building, Salt Lake City.

VIRGINIA: *Examination,* Richmond, Dec. 2-3. *Reciprocity,* Richmond, Dec. 1. Sec., Dr. K. D. Graves, 631 First St., S.W., Roanoke.

WASHINGTON: * Seattle, January. Director, Department of Licenses, Mr. Edward C. Dohm, Olympia.

WISCONSIN: * *Examination.* Madison, Jan. 10-12. Sec., Dr. C. A. Dawson, River Falls.

* Basic Science Certificate required.

BOARDS OF EXAMINERS IN THE BASIC SCIENCES

ARIZONA: *Examination.* Tucson, Dec. 20. Sec., Mr. Francis A. Roy, Science Hall, University of Arizona, Tucson.

COLORADO: *Examination.* Denver, Dec. 7-8. Sec., Dr. Esther B. Starks, 1459 Ogden Street, Denver.

OKLAHOMA: *Examination.* Oklahoma City, April 11. Sec., Dr. Clinton Gallaher, 813 Braniff Building, Oklahoma City.

OREGON: Portland, Dec. 3. Sec., Mr. Charles D. Byrne, State Board of Higher Education, Eugene.

SOUTH DAKOTA: Vermillion, Dec. 2-3. Sec., Dr. Gregg M. Evans, 310 E. 15th St., Yankton.

TENNESSEE: *Examination.* Memphis, Dec. 30-31. Sec., Dr. O. W. Hyman, 874 Union Avenue, Memphis 3.

WASHINGTON: Seattle, January. Sec., Department of Licenses, Mr. Edward C. Dohm, Olympia.

WISCONSIN: Milwaukee, Dec. 3. Madison, April 1. Sec., Prof. W. H. Barber, Ripon College, Ripon.

Medical Motion Pictures

FILM REVIEWS

Journey into Medicine. 16 mm., black and white, sound, 1,480 feet (1 reel), showing time thirty-eight minutes. Produced in 1947 by Affiliated Films for the United States Department of State for use in its international information program abroad. Procurable on loan from Federal Security Agency, Washington 25, D. C., and regional offices or procurable on purchase from Castle Films, 1445 Park Avenue, New York 29, by the following groups and individuals without prior authorization: American Medical Association, American Dental Association, American Hospital Association, state and local organizations affiliated with these associations, physicians and dentists, accredited schools of medicine, accredited schools of public health, public health officials and United States government agencies. Individuals or organizations not falling within the groups named should apply to the United States Public Health Service for purchase authorization.

This is a documentary film originally produced for the purpose of giving people in foreign countries a better understanding of medical and public health education in the United States.

It depicts the experience and thoughts of a student from a small up-state college, taking his medical course at the Columbia-Presbyterian Medical Center, his internship at the New York Hospital (Cornell Center), his course in pediatrics followed by a hygiene and public health course at Johns Hopkins School of Medicine and some practical epidemiologic work in Baltimore.

In viewing the film, one might be left with the impression that the medical course is shorter and much freer of routine than it actually is. It is regrettable that the important subject of anatomy and dissection and physiology and laboratory work with animals were not mentioned; however, the preparatory course of a public health physician is fairly and adequately portrayed.

The film can be used as a recruitment aid to assist high school and college students in making their choice of vocation or as a vocational guidance for undergraduate medical students to stimulate interest in public health education.

The photography, direction and narration are excellent.

Meeting Emotional Needs in Childhood. The Groundwork of Democracy. 16 mm., black and white, sound, 1,200 feet (1 reel), showing time thirty-three minutes. Produced in 1947 by the Department of Child Study, Vassar College as one of a series of films in Studies of Normal Personality Development. Procurable on rental or purchase from the New York University Film Library, 26 Washington Place, New York 3.

This film shows child development, particularly the evolution of the personality as the result of personal relations, especially with persons in the home. It points out certain home relations which might lead to unsocial activities in later childhood and portrays how good social attitudes can be developed through carefully adjusted parent-child relationship. An effort is made to illustrate how children can be helped to feel secure and increasingly independent. Their attitudes in the classrooms, the playground and their association with others are well demonstrated. The approach which teachers may take in handling these problems in the schoolroom and suggestions for parent understanding are brought out.

This motion picture is a plea for parent understanding of the effects of early family experiences on later emotional and social development. It should be applicable to parent-teachers associations, parents' study groups, teachers, nurses, social workers and other professional groups who work with children. Technically, it leaves much to be desired. It is not well organized, and the photography is rather poor. However, it may be the best film on this subject available at this time.

Bureau of Legal Medicine and Legislation

MEDICOLEGAL ABSTRACTS

Drunkenness: Scientific Recognition of Chemical Tests for Intoxication.—The defendant was convicted of negligent homicide and appealed to the Supreme Court of Michigan.

The defendant contended that the trial court had erred in admitting into evidence testimony concerning the results of a test voluntarily taken by him on a "Harger drunkometer" and deductions drawn therefrom as to his having been under the influence of intoxicating liquor at the time of the accident.

It was the contention of the prosecution that it is generally accepted by medical authorities (1) that a chemical analysis of a specimen of blood, urine or other body fluid will accurately disclose the percentage of alcohol contained in the blood, and (2) that when the blood alcohol concentrate of a subject is 0.15 per cent or more, by weight, he is under the influence of intoxicating liquor to the extent of impairment of his ability to drive an automobile. On the basis of such general acceptance by the medical profession it has been held that evidence of the taking of such specimen at or near the time in question, of its chemical analysis and of the alcoholic content of the blood as determined by such analysis, together with expert opinion testimony as to what the presence of such alcoholic content in the blood indicates with respect to the subject's intoxication or sobriety, are admissible.

The question for determination on this appeal, said the Supreme Court, is "Is there general scientific recognition that the breath test applied by the Harger 'drunkometer' will afford an accurate index of the alcoholic content of the blood?" Two policemen, both trained in chemistry, one of whom studied the "drunkometer" for a month under the inventor and then instructed the other with respect thereto, and a doctor, who had worked as a student assistant to the inventor, Harger, gave complex explanations of the underlying theory and modus operandi of the device and testified for the prosecution that, in their opinion, the instrument produces accurate results as to the alcoholic content of the blood. To the same effect is an article by Harger and associates, "A Rapid Chemical Test for Intoxication Employing Breath," appearing in THE JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION (110:779 [March 12] 1938). Against this was the testimony of five doctors sworn for the defense, one of whom testified that "what is going on in this test is that you have got a continuous series of errors, some for and some against, so that the thing works like a slot machine," and another of whom testified that most of the medical profession do not regard the instrument reliable. Their views find direct support in a report appearing in the *Journal of Laboratory and Clinical Medicine* (26:1527 [June] 1941) by Dr. Haggard, professor of physiology and director of the Alcohol Institute at Yale University, and others and, indirectly, in other medical and scientific reports and articles. Under the state of the record there would seem to be applicable here, said the Supreme Court of Michigan, what the Supreme Court of Wisconsin said concerning the so-called lie-detector test:

"The present necessity for elaborate exposition of its theory and demonstration of its practical working, in order to convince the jury of its probative tendencies, together with the possibility of attacks upon the soundness of its underlying theory and its practical usefulness, may easily result in a trial of the lie detector rather than the issues in the cause."

There is no testimony in the record, the Supreme Court of Michigan continued, that there is general acceptance by the medical profession or general scientific recognition of the results of a Harger "drunkometer" test as accurately establishing the alcoholic content of a subject's blood and thus the extent of his intoxication. Accordingly, the admission in evidence of testimony concerning the "drunkometer" and the results of the test thereby imposed on the defendant was error, the conviction was reversed and a new trial ordered.—*People v. Morse, 38 N. W. (2d) 322 (Mich., 1949).*

Drunkenness: Admissibility in Evidence of Results of Chemical Test.—The defendant was convicted on a charge of driving on a public highway while intoxicated and from such conviction he appealed to the court of criminal appeals of Texas.

The prosecution rested its case on the evidence of the arresting officers and the expert testimony of a doctor as to the results of a test made by the officer of the alcoholic content of the defendant's breath. This evidence was based on a showing made by forcing the breath of the defendant, by a process thoroughly described, through a machine designated the "Harger breathometer." The evidence contained a description of this machine and the nature of the test made through it, together with the doctor's opinion of the result of the test.

The defendant had signed an agreement for this test which, though it did not relate to the particular instrument described, provided ". . . do freely and voluntarily request that a test for alcohol be given me, and further state that the result of such test may be used in evidence against me on my trial for the offense concerning which such alcohol test is herein made." Pursuant to this agreement the test referred to was made. The officer having charge of it testified as to the process involved and the result of his finding and the doctor then commented, giving his opinion as to the intoxication of the defendant based on such alcoholic content.

In the defendant's brief appeared the following statement: "There was a further objection based on the theory that if the defendant was drunk he could not give his consent but appellant, through counsel, waives this position as not being particularly well taken and the law is well settled on this point." In view of the defendant's agreement that the test be made and that the evidence be introduced, said the court of appeals, the same was properly before the trial court for such consideration as he saw fit to give it as a circumstance. The evidence of the arresting officers amply justified the court's action in finding the defendant guilty. Since the evidence of the physician was admitted without any valid objection, we are not to be understood as holding, the court continued, that the evidence of the result of the test would be admissible over proper objection. That question is not before us. Accordingly, the defendant's conviction was sustained.—*Guenther v. State, 221 S. W. (2d) 781 (Texas, 1949).*

Current Medical Literature

AMERICAN

The Association library lends periodicals to members of the Association and to individual subscribers in continental United States and Canada for a period of three days. Three journals may be borrowed at a time. Periodicals are available from 1938 to date. Requests for issues of earlier date cannot be filled. Requests should be accompanied by stamps to cover postage (6 cents if one and 18 cents if three periodicals are requested). Periodicals published by the American Medical Association are not available for lending but can be supplied on purchase order. Reprints as a rule are the property of authors and can be obtained for permanent possession only from them.

Titles marked with an asterisk (*) are abstracted below.

American Journal of Hygiene, Baltimore

49:247-390 (May) 1949. Partial Index

Distribution of Rats in Baltimore, Maryland. D. E. Davis and W. T. Fales.—p. 247.
Experimental Studies on Role of Filth Flies in Transmission of Endamoeba Histolytica. A. C. Pipkin.—p. 255.
Vesical Schistosomiasis in the Middle East with Report of Two New Foci in Northern Syria. A. C. Pipkin and E. Rizk.—p. 276.
Control of Anopheles Pseudopunctipennis in Mexico with DDT Residual Sprays Applied in Buildings. Part II. J. B. Gahan, W. G. Downs and H. Celiss.—p. 285.
Schistosome Dermatitis, a Sensitization Phenomenon. L. Oliver.—p. 290.
Antibody Response of Rabbits to Rickettsial Vaccines in Water-in-Oil Emulsion. J. P. Fox.—p. 303.
Relative Infectability of Laboratory Animals and Chick Embryos with Rickettsiae of Murine or of Epidemic Typhus. J. P. Fox.—p. 313.
Antibody Response to Vaccination Against Murine Typhus. J. F. Fox, E. R. Richard, J. van der Scheer and H. R. Cox.—p. 321.
Effect of Typhus Vaccine on Numbers of Rickettsiae in Body Lice of Typhus Patients. J. C. Snyder, E. S. Murray, A. Yeomans and others.—p. 340.
Studies in Human Malaria. D. S. Ruhe, W. C. Cooper, G. R. Coatney and E. S. Josephson.—p. 346.

Archives of Otolaryngology, Chicago

49:447-574 (May) 1949

Functioning of Air Cell System of Mastoid Process in Audition. P. G. Macdonald.—p. 447.
Antral Window in the Middle Meatus: Experiments and Presentation of Cases in Which Antral Window Was Made in the Middle Meatus of Human Subject and No Additional Surgical Procedures Were Performed. W. W. Wilkerson Jr.—p. 463.
Symptomatic Elongated Styloid Process: Report of Two Cases of Styloid Process—Carotid Artery Syndrome with Operation. W. W. Eagle. —p. 490.
*Radiation Therapy for Conductive Deafness: Report of Results and Discussion of Roentgen and Radium Irradiation. H. C. Rosenberger. —p. 504.
*Hearing Reeducation Without Use of Hearing Aids: Report, Analysis and Interpretation of Results in Fifty Hard of Hearing Patients. V. L. Browd.—p. 511.
Is it Possible to Cover the Fenestra Nov-Ovalis with Shrapnell's Membrane? Anatomic Study. S. Rosen.—p. 529.
Hemangioma of the Ear and Mastoid Process: Report of Two Cases. M. V. Miller.—p. 535.
Clinical and Pathologic Aural Findings in Case of Carcinomatosis of the Meninges. E. Grabscheid.—p. 547.
Squamositis, Mastoiditis and Squamomastoiditis. D. A. DeLisa.—p. 558.

Radiation for Deafness.—Rosenberger treated 13 boys and 8 girls between the ages of 2½ and 14 years by roentgen irradiation of the nasopharynx for diminished hearing of conductive type thought to be caused by tubal blockage of lymphoid origin. The tonsils and the adenoids had been previously removed in every instance. The typical patient was one who had recurring colds, frequently associated with differing combinations of otalgia, stuffiness of the ears, tinnitus and variable hearing. In some instances the patient had had one or more attacks of suppurative otitis media. The patient was showing little if any improvement following standard otologic treatment. Of the 21 patients whose nasopharyngeal tissues were irradiated, only 7 showed significant improvement of hearing, but in several of these the gain amounted to as much as 30 decibels in the critical frequencies. In practicing roentgen rather than radium radiation, both of which may be administered effectively, the author was influenced by the advantage of a larger field covered by the exposure, which lessens the possibility of misapplication or misdirection of radiant energy. Each patient had a total of four treatments, and in no instance were subsequent treatments given. It is possible that additional treatments might have increased the percentage of favorable results. One disappointing feature was the recurrence of aural symptoms and of depression of hearing with subsequent colds, although in several patients the incidence of colds seemed lessened.

Hearing Reeducation Without Hearing Aids.—Browd treated 46 consecutive, unselected patients between the ages of 20 and 57, applying for the relief of a troublesome and noticeable auditory impairment of an average duration of twelve years, by auditory reeducation without the use of a hearing aid. The patients showed a hearing loss of 20 decibels or more in the better ear. Interpretation of sounds and discrimination of sounds are important features of reeducation of hearing, and, since speech is the most important and most frequently heard of the day's sound, speech is the principal vehicle employed and its interpretation one of the first steps in the therapy. Seated face to face with the patient at a distance at which a conversational tone of voice can just be comfortably heard by him, the speaker delivers simple statements concerning a single topic at conversational loudness. The patient is asked to repeat whatever he hears, and if he is correct he is so informed. This is continued for several minutes. When possible this procedure is repeated daily thereafter. Further improvement of the understanding of speech is subsequently conferred by correcting misinterpreted speech. The patient is given many opportunities of identifying at close range the inadequate sound pattern he receives with bells, buzzers, whistles, ticking of the clock, rapping on doors and other sounds encountered by the patient in his office, shop or occupation. As he becomes familiar with the sounds and demonstrates his ability to recognize them, they are presented to him from increasingly greater distances. The approach is the same for all patients, but individual variations are the rule. None of the work is done in groups. Treatment continues as long as progress is observed, generally for three to six months. Only 9 of the author's patients continued to have either a disabling or a noticeable degree of impairment. The remaining 37 showed either no disability or only occasional evidence of it. None of the latter group has reported a regression of hearing, and 5 had maintained their improvement for three years. Patients with a 20 to 35 decibel loss in the better ear can tolerate a hearing aid in few situations in the course of the day. On that account, they have in the past been forced to remain hard of hearing, although numerically they constitute an appreciable portion of the hard of hearing group. When given auditory reeducation alone, few of them fail to attain a satisfactory level of hearing.

Connecticut State Medical Journal, Hartford

13:515-616 (June) 1949

Rheumatic Heart Disease in Seventh and Eighth Grade Connecticut School Children: Study in Differential Prevalence. R. W. Quinn, J. H. Watkins and Julia P. Quinn.—p. 515.
Loss of Consciousness and Convulsions in Middle-Aged Patients. P. I. Yakovlev.—p. 521.
Treatment and Management of Congestive Heart Failure. I. S. Edwith. —p. 527.
Old Age. J. A. Wilson.—p. 531.
Active Immunization in Private Practice. J. E. Gordon.—p. 533.
Licensing of Foreign Medical Graduates in the United States. C. Barker and Grace Mooney.—p. 542.

Endocrinology, Springfield, Ill.

44:391-486 (May) 1949. Partial Index

Altered Glucose Tolerance with Histologically Normal Islets Following Repeated Small Doses of Alloxan. D. W. Molander and A. Kirschbaum.—p. 391.
Insulin Hypersensitivity Following Administration of Desoxycorticosterone Acetate. Chi-Ping Cheng and G. Sayers.—p. 400.
New Procedure for Determination of Antidiuretic Principle in Urine. A. Grollman and Betty Woods.—p. 409.
Antidiuretic Hormone in Urine in Experimental and Clinical Hypertension. M. E. Ellis and A. Grollman.—p. 415.
Influence of Ascorbic Acid on Adrenal Weight During Exposure to Cold. L. P. Dugal and M. Thérien.—p. 430.
Action of Testosterone on Adrenal Cortex of Hypophysectomized, Prepuberally Castrated Male Mouse. I. C. Jones.—p. 427.
Concentration of Adrenocorticotrophic Hormone in Rat, Procaine and Human Pituitary Tissue. T. W. Burns, M. Merkin, M. A. Sayers and G. Sayers.—p. 439.
Physiologic Activities of Stereoisomers of Thyroxine. W. E. Griesbach, T. H. Kennedy and H. D. Purves.—p. 445.
Influence of Thyroxine on Protein Metabolism. J. Rupp, K. E. Paschkis and A. Cantarow.—p. 449.
Studies on Nature of Protein Catabolic Response to Adrenal Cortical Extract. F. L. Engel, Sara Schiller and E. Irene Pentz.—p. 458.

Gastroenterology, Baltimore

12:721-918 (May) 1949

Report of Recent Medical Journey Through Europe. A. M. Snell.—p. 721.
*Recurrence of Peptic Ulcer in Man as Affected by Treatment with Enterogastrone Preparation. A. C. Ivy, A. Littman and M. I. Grossman.—p. 735.
Gastric Surgery: Review of Literature. S. F. Marshall and E. S. Phillips.—p. 748.
Flexi-Rigid, Optical Esophagoscope. A. R. Hufford.—p. 779.
Quantity and Composition of Human Colonic Flatus. E. Kirk.—p. 782.
*Digestion and Absorption After Massive Resection of Small Intestine: I. Utilization of Food from "Natural" Versus "Synthetic" Diet and Comparison of Intestinal Absorption Tests with Nutritional Balance Studies in Patients with Only 45 Cm. of Small Intestine. T. L. Althausen, K. Uyeyama and R. G. Simpson.—p. 795.
Histo-Physiologic Study of Effect of Intraarterial Injection of Acetylcholine upon Gastric Mucosa of Dog. G. M. Morton and G. W. Stavraky.—p. 808.
Three Main Components of Human Gastric Mucin: Dissolved Mucoprotease, Dissolved Mucoprotein, and Mucoid of Gastric Visible Mucus. G. B. Jerzy Glass and L. J. Boyd.—p. 821.
Acute Corrosive Gastritis: Observations on Gastric Mucosa Following Ingestion of Concentrated Hydrochloric Acid. E. D. Palmer and N. M. Scott Jr.—p. 879.
Acute Phlegmonous Gastritis. M. S. Wessell, E. L. Wilbur and R. A. Burger.—p. 884.
Perforation of Duodenal Ulcer Following Vagus Resection. P. O. Thomas.—p. 890.

Enterogastrone in Recurrence of Gastric Ulcer.—Ivy and co-workers report observations for 33 of 39 patients mentioned in a previous report and 13 additional patients. Thus 46 patients who received a course of enterogastrone injections (in most instances three or six times per week for one year) and whose subsequent course after stopping the treatment had been followed for as long as five years are reported. During the year of treatment, 41 per cent of the patients were symptom free and an additional 46 per cent had fewer recurrences. At the end of the second year (after discontinuing treatment) 40 per cent had fewer recurrences. The average of the longest symptom-free period in these 46 patients was 0.3 year during the two year period prior to therapy and 0.9 year after the therapy. The difference between 0.3 and 0.9 year is statistically significant. The authors feel that their results are sufficiently clear to conclude that there is probably an antiulcer substance in the enterogastrone preparation which tends to prevent recurrences in man. The purification of this factor is the subject of continuing research.

Digestion After Resection of Small Intestine.—Althausen and associates present studies of a woman, aged 47, in whom 435 cm. of the small intestine had been resected. The resected portion included the entire ileum and all but the upper 15 cm. of the jejunum. The remainder of the jejunum was anastomosed to the middle part of the transverse colon. The resection was carried out because of mesenteric thrombosis following appendectomy. The greatest problem has been the utilization of an adequate amount of food to maintain weight and strength. The patient's weight through adult life was about 64 Kg. As a result of the operation, the patient's weight decreased to 39.4 Kg. ten months after the operation. Thereafter, it increased to 42 Kg. and remained at this figure as of the time of writing. After ten months the woman had reached a nutritional equilibrium, which made her a good subject for the study of problems bearing on the diagnosis and treatment of diseases of the small intestine. No striking differences were found in the degree of utilization of a diet consisting of natural foods as compared with a synthetic diet. On the natural diet proteins were best utilized, and on the synthetic diet fats were utilized somewhat better. The patient was more comfortable on the synthetic diet and was able to take somewhat larger amounts of it, but after a few weeks she refused to take considerable amounts of the synthetic formula even in combination with natural foods. These results show that the small intestine is much more important for the absorption than for the digestion of food and that predigested foods have only a limited use in diseases of the small intestine except for intravenous administration during acute phases. Impairment of intestinal absorption of proteins and of fats as judged by absorption tests was greater than that demonstrated in the same patient by nutritional balance studies. One reason is that the full load of each absorption test was imposed on this patient, whereas the intake of food in the balance studies was below normal. Another reason is that in absorption tests the element of time is strictly controlled, while in balance studies there is an opportunity for overtime work by the disabled intestine. The greatest divergence between absorption test and balance studies was found in regard to carbohydrates, because destruction of the latter by bacterial action in the colon renders nutritional balance studies entirely unreliable where carbohydrates are concerned.

Journal of Aviation Medicine, St. Paul

20:91-145 (April) 1949

Linear Acceleration and Deceleration as Factors Influencing Nonvisual Orientation During Flight. B. Clark and A. Graybiel.—p. 92.
Studies to Improve Visibility of Aircraft by Use of Suitable Exterior Paint Schemes. H. G. Wagner, I. C. Blasdel and J. R. Poppen.—p. 102.
Practical Testing and Treating of Aircraft Drinking Water. F. H. Shillito and M. K. Peetz.—p. 114.
Biology of Temperament. L. H. Goldberg.—p. 120.
Anabolic Effects of Propylthiouracil on Leanness. J. Levy and J. A. Levy.—p. 124.
The Pilot Speaks. G. S. Backenstoe.—p. 130.
Problems in Aero Medical Nursing. F. P. Thorp.—p. 136.

Journal of Bacteriology, Baltimore

57:477-574 (May) 1949. **Partial Index**

Inhibition of Growth of Escherichia Coli by Some Derivatives of Urea. I. M. Klotz and M. Mellody.—p. 477.
*Method for Determination of Aureomycin in Blood. S. S. Schneierson and B. Toharsky.—p. 483.
Sensitivity Changes of Actinomyces Bovis to Penicillin and Streptomycin. A. Boand and M. Novak.—p. 501.
Tuberculostatic Action of Nocardia Extracts in White Mice. E. W. Emmart, R. E. Kissling and T. H. Stark.—p. 509.
Development of Proteus Cultures in Presence of Penicillin. L. Dienes.—p. 529.
Effect of Temperature upon Bacteriostasis. W. P. Van Eseltine and O. Rahn.—p. 547.
Production of Phenol and Para-Cresol by Marine Bacteria. D. M. Updegraff.—p. 555.
Spontaneous Mutation to Streptomycin Resistance and Dependence in Escherichia Coli. H. B. Newcombe and R. Hawirko.—p. 565.

Determination of Aureomycin in Blood. — Schneierson and Toharsky describe a procedure for determination of the concentration of aureomycin in the blood. They use a tube dilution method, in which the tubes are incubated at room temperature. Satisfactory correlation between known concentration of the drug and the results of assay was found with 36 prepared samples. Periodic blood levels up to twenty-four hours after administration were determined in two groups of patients receiving 250 and 500 mg. of aureomycin orally in a single dose. A significant level of the antibiotic was found in the blood of both groups of patients after twelve hours.

Journal of Clin. Endocrinology, Springfield, Ill.

9:403-480 (May) 1949

*Addison's Disease and Diabetes Mellitus in 3 Patients. S. L. Simpson.—p. 403.
Excretion of 17-Ketosteroids: I. Normal Values in Relation to Age and Sex. S. Kenigsberg, S. Pearson and T. H. McGavack.—p. 426.
Thyroid Collection of Radioactive Iodide and Serum Protein—Bound Iodine Concentration in Senescence, in Hypothyroidism and in Hypopituitarism. M. Perlmutter and D. S. Riggs.—p. 430.
Decreases in Blood Eosinophilic Leukocytes After Electrically Induced Convulsions in Man. M. D. Altschule, B. H. Parkhurst and K. L. Tillotson.—p. 440.
Thiocyanate Goiter with Myxedema: Report of 2 Cases. C. E. Richards, R. J. Brockhurst and T. H. Coleman.—p. 446.
Adrenal Cortical Carcinoma in Male with Excess Gonadotropin in Urine. W. L. Chambers.—p. 451.
Gynecomastia in Paraplegic Males: Report of 7 Cases. I. S. Cooper and T. I. Hoen.—p. 457.
Use of Bismuth Salts in Treatment of Sporadic Goiters. M. Villaverde.—p. 462.

Addison's Disease and Diabetes Mellitus. — Simpson described in 1932 a case of diabetes mellitus developing in a boy aged 16 with preexisting Addison's disease (adrenal cortical hypofunction). Necropsy revealed atrophy of the cortex of both adrenal glands and of the islets of Langerhans. He reports 2 further cases of coexistence of adrenal cortical hypofunction and diabetes mellitus, one coming to necropsy. A résumé is given of 15 cases recorded in the literature in which necropsies were performed and 6 additional cases without necropsies. The 17 necropsies revealed reduction in size and staining power of the islet cells of the pancreas sometimes with hyalinization, an increase in connective tissue and lymphocytic infiltration. The

adrenal lesions were those of atrophy in 10 cases and of tuberculosis in 3. Included in the foregoing series were 2 instances of hemochromatosis, in 1 of which the adrenal lesion was fibrosis and in the other, coincidental tuberculosis. Clinically, adrenal and islet-cell insufficiency may be manifested simultaneously, or either may precede the other. When Addison's disease comes first, diabetes mellitus may be latent for months or years before manifesting itself. The evidence tends to confirm the author's suggestion, first made in 1932, that the coexistence of adrenal and islet-cell atrophy may be due to a common infective lesion. When adrenal insufficiency is superimposed on diabetes mellitus, there is a progressive reduction in insulin requirements, an increase in insulin sensitivity, instability of blood sugar levels and a proneness to sudden hypoglycemia. The existence or superimposition of adrenal insufficiency leads to a progressive loss of weight and of fat, even with reasonable substitution therapy. Ultimately, death is usually due to adrenal insufficiency rather than diabetic coma.

Journal of Clinical Investigation, Cincinnati

28:409-582 (May) 1949. Partial Index

Some Observations on Development of Hypokalemia During Therapy of Diabetic Acidosis in Juvenile and Young Adult Subjects. L. Greenman, F. M. Mater, R. C. Gow and others.—p. 409.
Effect of Bilateral Stellate Ganglion Block on Cerebral Circulation in Normotensive and Hypertensive Patients. M. H. Harmel, J. H. Haftenschiel, G. M. Austin and others.—p. 415.
Peptidase Activity in Human Serum Following Bone Fracture. K. Stern, A. M. Cullen and V. T. Barber.—p. 419.
Renal Regulation of Acid-Base Balance in Man. IV. Nature of Renal Compensations in Ammonium Chloride Acidosis. O. W. Sartorius, J. C. Bonnnelt and R. F. Pitts.—p. 423.
Effects of Histamine on Renal Function in Hypertensive and Normotensive Subjects. F. C. Reubi and P. H. Futcher.—p. 440.
Studies of Coproporphyria. C. J. Watson, V. Hawkinson, S. Schwartz and D. Sutherland.—p. 447.
III. Fate of Citrate in Erythroblastotic Infants Treated with Exchange Transfusion. I. B. Wexler, J. B. Pincus, S. Natelson and J. K. Lugovoy.—p. 474.
Electrolyte Changes in Human Striated Muscle in Acidosis and Alkalosis. G. H. Mudge and K. Vislocky.—p. 482.
Studies on Free Erythrocyte Protoporphyrin, Serum Iron, Serum Iron-Binding Capacity and Plasma Copper During Normal Pregnancy. J. Fay, F. E. Cartwright and M. M. Wintrobe.—p. 487.
Studies on Activation of Serum "Prothrombin-Converting Factor." R. F. Jacox.—p. 492.
Studies in Iron Transportation and Metabolism: VII. Evidence Obtained with Radioactive Iron That "Easily Split-Off" Blood Iron Is an Artefact. M. Grinstein and C. V. Moore.—p. 505.
Factor Determining Location of Pseudofractures in Osteomalacia. M. Le May and J. W. Blunt Jr.—p. 521.
Oxygen Consumption of Normal and Diseased Human Kidney. W. H. Cargill and J. B. Hickam.—p. 526.
Measurement of Glomerular and Tubular Plasma Flow in Normal and Diseased Human Kidney. W. H. Cargill.—p. 533.
Hypervolemic Anemia in Cirrhosis. J. C. Bateman, H. M. Shorr and T. Elgvin.—p. 539.
Acceleration of Linear Flow in Deep Veins of Lower Extremity of Man by Local Compression. J. R. Stanton, E. D. Freis and R. W. Wilkins.—p. 553.
Effect of Exercise and Body Position on Venous Pressure at Ankle in Patients Having Venous Valvular Defects. A. A. Pollack, B. E. Taylor, T. T. Myers and E. H. Wood.—p. 559.
Inhibition of Frostbite Wheals by Iontophoresis of Antihistaminic Agents.

Journal of Nutrition, Philadelphia

38:1-104 (May) 1949. Partial Index

Energy Expenditure of Boys and Girls 9 to 11 Years of Age (1) Sitting Listening to Radio (Phonograph), (2) Sitting Singing and (3) Standing Singing. C. M. Taylor, O. F. Pye, A. B. Caldwell and E. R. Sostman.—p. 1.
Pteroylglutamic Acid and Reproduction in Rat. M. M. Nelson and H. M. Evans.—p. 11.
Microbiological Assay of "Folic Acid" as Applied to Milk. A. Z. Hodson.—p. 25.
Effects of Thiouracil on Metabolism. J. W. Bratzler, J. R. Parnes and R. W. Swift.—p. 41.
Simultaneous Surveys of Food Consumption in Various Camps of the United States Army. H. C. Schor and H. L. Swain.—p. 51.
*Food Consumption of Soldiers in Subarctic Climate (Fort Churchill, Manitoba, Canada, 1947-1948). H. L. Swain, F. M. Toth, F. C. Consolazio and others.—p. 63.

Food Consumption of Soldiers in a Subarctic Climate.—Swain and associates made a study of the voluntary food consumption of garrison troops at Fort Churchill, Manitoba, Canada, during ten day periods in November 1947, February 1948 and April 1948. The troops ate together in the same mess and received an abundant ration of fresh and frozen foods, providing 5,500 calories per man per day. In the three surveys the average daily consumption per man, including canteen purchases, was 5,620, 5,590 and 5,690 calories. The intake was well above the allowances for active men recommended by the United States National Research Council. The troops were in good health throughout the winter and maintained their body weight. The caloric intake in the three surveys was inversely correlated with the mean outdoor temperatures prevailing at the time of survey and was directly correlated with the mean windchill.

Journal of Urology, Baltimore

61:821-980 (May) 1949. Partial Index

*Studies in Urolithiasis: II. Relationships Between Pathogenesis, Structure and Composition of Calculi. E. L. Prien.—p. 821.
*Urinary Tract Calculi in Recumbent Patients. J. C. Kimbrough and J. C. Denslow.—p. 837.
Involvement of Renal Capsule in Surgically Removed Hypernephroma: Gross and Histopathologic Study. J. B. Beare and J. R. McDonald.—p. 857.
Unilateral Polycystic Kidney Disease. G. D. Oppenheimer and L. Narins.—p. 866.
Late Renal Changes in Paraplegia: Hydronephrosis Due to Vesico-Ureteral Reflux. H. S. Talbot and R. C. Bunts.—p. 870.
Surgical Treatment of Megalo-Ureter and Presentation of Artificial Ureter. T. B. Wayman.—p. 883.
Empyema of Residual Ureter. J. W. Best and J. K. Ormond.—p. 904.
Bladder Tumors—Clinical Evaluation of Radical Transurethral Management. L. R. Reynolds, T. L. Schulte and H. J. Hammer.—p. 912.
Transurethral Biopsy: Accurate Method of Determining True Malignancy of Bladder Carcinoma. W. A. Milner.—p. 917.
Extravesical Prostatectomy: Comparison of Retropubic and Perineal Prostatectomy. R. Lich Jr., O. Grant and J. E. Maurer.—p. 930.
Evaluation of Management of Peri-Urethral Phlegmon in 272 Consecutive Cases at the Cook County Hospital. W. J. Baker, J. L. Wilkey and L. J. Barson.—p. 943.
Report of Case of Adrenal-Type Tumor of Spermatic Cord; Review of Aberrant Adrenal Tissues. T. Gualtieri and A. D. Segal.—p. 949.
Reconstruction of Scrotum: New Use for the Prepuce. F. M. Jacobs and J. L. Berry.—p. 956.
The Urologist and Artificial Insemination. M. L. Brodny and D. Rosen.—p. 960.
Genito-Urinary Aspects of Early Filariasis. D. E. Murray.—p. 967.

Urolithiasis.—Prien studied various phenomena and mechanisms of calculogenesis from the standpoint of crystallography. Pure calcium oxalate and calcium oxalate plus apatite, a complex calcium phosphate, were the substances most frequently observed in 1,000 human urinary calculi. In dissection of the nuclei of the calculi with a needle under binocular stereoscopic vision the crystalline material was identified as follows: The nuclei of calcium oxalate monohydrate calculi are composed of that substance or of apatite. Some of the calculi have a concavity on one surface with a structure which may be a pedicle in the bottom suggesting origin from a surface such as the renal papilla. It is believed that some calculi originate from an attachment to the renal papilla, as described by Randall. Papillary incrustations were produced experimentally in rats. Not all calcium oxalate monohydrate calculi originate in this manner; those with a central nucleus and symmetric, concentric layers are believed to originate by crystallization from supersaturated urine. No evidence has been found to support the theory that foreign bodies, such as desquamated epithelium, act as the nucleus for renal calculi. Calcium oxalate dihydrate calculi do not appear to have a nucleus. Study of the nucleus of calculi composed of apatite and magnesium ammonium phosphate hexahydrate is less satisfactory because of irregularity of the calculi. The metal cation rather than the acid radical is most important in a consideration of calculi from the standpoint of pathogenesis. It is possible to correlate, by optical crystallographic study, pathogenesis with composition and structure of various types of calculi. It is often possible to reconstruct the clinical history by an optical study of the calculus obtained from the patient.

Urinary Tract Calculi in Recumbent Patients.—Kimbrough and Denslow report the occurrence of urinary calculi in 15 of 800 young recumbent patients, immobilized for long periods for bone injury. The incidence of such a small percentage (2 per cent) of calculus formation in such a large number of hospitalized patients with similar injuries with almost identical management makes it evident that there is a stone diathesis due to general derangement of metabolism and/or local renal factors. Reduced fluid intake, stasis and focal infec-

tions are the chief etiologic factors. Infections of the urinary tract are not important. The shortest period noted for formation of calculi was 74 days and the longest 1,200; the average time was 362 and the mean time 272 days. Adequate proper care of patients immobilized long periods because of bone injury will prevent urolithiasis in almost all cases. It is difficult to carry on an adequate regimen of fluid intake, diet, movement of patient and chemotherapy for all the immobilized patients in a large service. The selection of patients especially susceptible to urolithiasis and concentration of preventive measures for them will produce good results. Removal of calculi by dissolution and spontaneous passage is the choice method of treatment. Manipulation should be practiced with caution and conservatism. Operative treatment should not be delayed when reasonable attempts at other measures are unsuccessful. Repeated roentgen studies of the urinary tract for detection of calculus and frequent urine cultures to note infection should be carried out.

J. Venereal Disease Information, Washington, D. C.

30:125-158 (May) 1949

Penicillin Therapy of Early Syphilis: IV. R. C. Arnold, J. F. Mahoney, F. P. Nicholson and R. D. Wright.—p. 125.
Venereal Disease Case Finding in Quitman County, Mississippi. A. L. Gray, H. Boone and R. S. Hibbets.—p. 127.
Socioeconomic Factors in Syphilis Prevalence, Savannah, Georgia. C. D. Bowdoin, C. A. Henderson, W. T. Davis Jr. and others.—p. 131.
Contact Investigation of Syphilis. J. S. Spoto and A. P. Iskrant.—p. 140.
Sugar Fermentations of Gram-Negative Diplococci Isolated from Genitourinary Tract of Penicillin-Treated Gonorrhea Patients. L. Wax.—p. 145.

30:159-182 (June) 1949

Stimulating Venereal Disease Morbidity Reporting by Private Physicians: I. Follow-up of Positive Serologic Test Reports. B. H. Sklar and L. M. Schuman.—p. 160.
Syphilis Contact Investigation in Rural County in Mississippi. A. L. Gray, A. P. Iskrant and R. S. Hibbets.—p. 165.
Stable Control Serum for Standardizing Sensitivity of Tests Used in Diagnosis and Control of Syphilis. G. R. Cannefax.—p. 169.

Maine Medical Association Journal, Portland

40:99-124 (May) 1949

Surgical Problems in Children. D. H. R. Lester.—p. 99.
Neuropsychiatric and Medical Aspects of Head Injuries. P. A. Jones.—p. 101.
Surgical Aspects of Head Injuries. G. L. Maltby.—p. 102.
Clinical Evaluation of Pyrrolazote and Orthoxine in Allergic Diseases. B. Zolov.—p. 105.
Relief of Asthmatic Seizures with Micronized Epinephrine 1:1,000. A. L. Maietta.—p. 108.
Dermatophytosis. O. F. Jillson.—p. 110.
Clinical Evaluation of Trimeton. H. I. Goldman.—p. 111.

40:125-172 (June) 1949

Cancer of Larynx: Report of Case. P. E. Provost.—p. 125.
Service for Veteran at Neuropsychiatric Hospital, Togus, Maine. I. Zetterman.—p. 126.
Surgery in Treatment of Gastro-Duodenal Ulcer. J. A. Nelson.—p. 128.
Amicrobic Pyuria: Report of 2 Cases. M. Emanuel.—p. 133.
*Myasthenia Gravis with Thymoma: Case Report. D. Kirkham.—p. 138.

Myasthenia Gravis with Thymoma.—Kirkham presents a history of a printer, aged 53, who was hospitalized for the seventh time at the Veterans Administration Hospital at Togus, Maine, on June 24, 1948. He was admitted to this hospital in November 1941, with a history of difficulty in eating, of six months' duration, consisting of frequent regurgitation of fluids through the nose, dropping of his jaw and inability to chew his food. He improved somewhat and was discharged in three weeks. The second admission was in December, for the same complaints. After several months in the hospital and continued ptosis, regurgitation, generalized weakness and difficulty in chewing, a diagnosis of myasthenia gravis was made and treatment was started with ephedrine sulfate ¾ grain (24 mg.) three times a day and 1 ampule of neostigmine daily by hypodermic injection. During the next six years, the patient was admitted on four occasions because of exacerbations of weakness associated with infections of the respiratory tract. The severity of his symptoms varied from time to time. For one week prior to the final admission, he had considerable cough and expectoration. He stated that he could not raise his sputum properly, so that it remained in his throat, causing him to gag and choke. During the patient's last stay in the hospital the course was stormy. Despite intensive treatment with neostigmine bromide, the use of the respirator and continued oxygen, he became increasingly cyanotic and died. Necropsy revealed a thymoma. Sixty-two of 100 patients reported in the literature were either cured or improved by the removal of the thymoma.

New England Journal of Medicine, Boston

240:787-824 (May 19) 1949

*Hypercalcemia Without Hypercalcuria or Hypophosphatemia, Calcinosis and Renal Insufficiency: Syndrome Following Prolonged Intake of Milk and Alkali. C. H. Burnett, R. R. Commons, F. Albright and J. E. Howard.—p. 787.
Death from Attempted Abortion with Potassium Permanganate Douche. W. W. Jetter and F. T. Hunter.—p. 794.
Hereditary Multiple Exostoses. J. Rose and P. D. Doolan.—p. 799.
Comparison of Pteroylglutamic Acid and Liver Extract Maintenance Therapy in Sprue. H. J. Fox.—p. 801.
Physiology of Human Conception. J. Rock.—p. 804.
Persistent Omphalomesenteric Duct, with Focal Ulceration, Probably Peptic.—p. 813.
Acute and Chronic Pancreatitis, with Pseudocyst Formation. Erosion of Superior Pancreaticoduodenal Artery.—p. 815.

Syndrome Following Prolonged Intake of Milk and Alkali.—Burnett and associates describe a syndrome they observed in 6 male patients with a history of peptic ulcer treated by excessive intake of milk and alkali for many years. The syndrome is characterized by hypercalcemia without hypercalcuria or hypophosphatemia, normal serum alkaline phosphatase levels, pronounced renal insufficiency with azotemia, mild alkalosis, calcinosis manifested especially by an ocular lesion resembling band keratitis and improvement on an intake low in milk and absorbable alkali. Although primary hyperparathyroidism could not be excluded positively in all patients, the evidence suggests that the abnormalities observed in the calcium and phosphorus metabolisms were a result of the following sequence of events: excessive intake of milk (a foodstuff high in calcium and phosphorus) and alkalis; renal damage; tendency to fixation in urinary calcium excretion; hypercalcemia; tendency to supersaturation in respect to calcium phosphate, and calcinosis. The improvement resulting from a low intake strongly supports this sequence. All 6 patients were found to have chronic renal failure. In the 2 patients who are still living and in the 3 who died, the histories gave no evidence of previous renal disease, although 2 were known to have had hypertension. The case in which a postmortem examination was performed showed a renal lesion diagnosed as pyelonephritis and nephrocalcinosis. From this case one might hypothesize that for the production of the syndrome the presence of underlying renal disease is necessary on which is superimposed the harmful effect of milk and alkalies. In 1 case the urine was normal, as were the results of a kidney biopsy done only two years before renal insufficiency developed, so that there was little evidence of antecedent renal disease in this case.

Rhode Island Medical Journal, Providence

32:241-300 (May) 1949

Acute Diverticulitis of Cecum: Report of 6 Cases. A. V. Migliaccio.—p. 255.
Aspects of Aviation Medicine. J. C. Early Jr.—p. 260.
Cutaneous Manifestations of Traveling Needle. F. Ronchese.—p. 264.
What Insurance Companies are Doing and Can Do to Extend Medical Care in New England. H. D. Locke.—p. 272.

Virginia Medical Monthly, Richmond

76:271-326 (June) 1949

Some Practical Public Health Problems in Virginia. E. M. Holmes Jr.—p. 275.
Use of Antihistamine Drugs in Dermatology. E. E. Barksdale and G. S. Ellis.—p. 278.
Bacterial Endocarditis: Its Early Diagnosis and Modern Treatment. P. D. Camp.—p. 281.
Intrathoracic Hour-Glass Ganglioneuroma: Case Report. H. C. Meredith Jr.—p. 288.
Hemostatic Absorbable Oxidized Cellulose in Traumatic Injuries. C. F. Johnston Jr.—p. 292.
Consideration of Effects of Minor Degrees of Failure of Fusion of Mullerian Ducts. Gwen S. Hudson.—p. 295.
Recognition of Late Pulmonary Residuals of Coccidioidomycosis. R. P. Pillow and T. E. Finnegan.—p. 298.
Precocious Puberty in Girls. R. H. Hoge.—p. 303.
Adult Cardiac Rehabilitation. N. Bloom.—p. 307.
Anesthesia in Its Relationship to Surgery. A. D. Hutton.—p. 308.

Wisconsin Medical Journal, Madison

48:393-472 (May) 1949

Clinical Expressions of Sarcoidosis (Boeck). H. A. Dickie and W. S. Middleton.—p. 407.
Primary Hyperparathyroidism with Parathyroid Adenoma: Report of Case. D. V. Elconin and J. R. Stone.—p. 413.
Research Progress on the Common Cold. N. H. Topping.—p. 418.
Hypothyroidism with Loss of Weight and Without Myxedema: Report of Case and Review of Literature. W. H. Spankus and B. J. Peters. —p. 421.
Etiology of Congenital Malformations. H. A. Sincock.—p. 427.

Yale Journal of Biology and Medicine, New Haven

21:365-448 (May) 1949

Brief Recollections of the Yale Medical School (1906-1920). G. Blumer. —p. 365.
Experimental Study on Influence of Different Vehicles on Generalized and Topical Effect of Penicillin G. E. Grunberg and R. J. Schnitzer. —p. 377.
*Duration of Immunity to Tetanus. H. W. Baird III.—p. 385.
Status of Field Factor in Biology. C. D. King.—p. 391.
Studies in Experimental Prostbite: IV. Response of Sympathetically Denervated Extremity to Freezing. R. E. Lemphe and H. B. Shumacker Jr.—p. 401.
Gross Efficiency of Growth of the Rat as Simple Mathematical Function of Time. J. Mayer.—p. 415.
*Digitoxin—Critical Review. W. C. Diefenbach and J. K. Meneely Jr. —p. 421.
Elevated Environmental Temperature: Its Possible Influence on Action of Spreading Factor. J. C. Opsahl.—p. 433.

Tetanus Immunity.—Baird tested 23 men between the ages of 20 and 30 years who had served in the armed forces and were given basic tetanus immunization with toxoid or who were given their last booster dose four or more years previously. Six of the 23 were tested before and five and seven days after a booster dose of 0.5 cc. of alum-precipitated toxoid was administered. The serum specimens of the remaining 17 men were obtained at five days only. Considerable variation was observed in the specimens tested. In every case the serum was observed to have at least 0.1 unit of antitoxin five days after the booster injection. The six serum specimens tested at seven days showed a continuance of the rise. In the 1 case in which no residual titer was found and the response was 0.0316 unit, closer investigation showed that the initial immunization had not been adequate. Nine others did not show the level considered as a minimum for protection before the booster dose was given. Results indicate that by present standards an adequate antitoxin response develops within five days after the injection of 0.5 cc. alum-precipitated toxoid.

Digitoxin.—According to Diefenbach and Meneely, the potency of 1 mg. of digitoxin is approximately equal to 1,000 mg. of U.S.P. XII digitalis powder and to 1 U.S.P. XII digitalis unit. A dose of 1.25 mg. of digitoxin induces the same degree of reduction of ventricular rate as 1.25 Gm. or 16.3 cat units of whole leaf digitalis. Therapeutically the most important use of digitoxin is in congestive heart failure. It is useful regardless of whether the failure is predominantly of the right or left ventricle or both. The cause of heart failure modifies the response to the drug. The best results are obtained when failure is due to hypertensive or arteriosclerotic heart disease. The excretion rate of the drug is limited, and, with excessive doses, the drug accumulates in the body to a point where toxic symptoms occur which are different in different persons. Anorexia usually appears before nausea and vomiting. Diarrhea and abdominal pain occur occasionally. Almost every clinically known type of cardiac arrythmia may occur. Whenever digitoxin is used, the appearance of signs of cardiac disorder must be watched for carefully, not only clinically but with the aid of the electrocardiogram, and such appearance should call for the immediate discontinuance of the drug. In a follow-up study of three months to two years of 100 consecutive patients with congestive heart failure treated with digitoxin, toxic symptoms were observed in 20 between the ages of 40 and 77. The toxic symptoms appear more frequently with digitoxin than with whole leaf digitalis, and they are more prolonged. In most patients 1.2 mg. of digitoxin given in the first twenty-four hours is not sufficient to achieve adequate digitalization. Initial digitalization may be best attained with multiple doses, i. e., 0.4 mg. every six hours until the desired effects are attained. The best over-all maintenance dose is 0.1 mg.

FOREIGN

An asterisk (*) before a title indicates that the article is abstracted. Single case reports and trials of new drugs are usually omitted.

British Medical Journal, London

1:1019-1062 (June 11) 1949

*Lumbo-Dorsal Sympathectomy in Severe Hypertension: Interim Survey. J. C. Harland and F. d'Abreu.—p. 1019.
*Painful Amputation Stumps and Phantom Limbs: Treatment by Repeated Percussion to Stump Neuromata. W. R. Russell.—p. 1024.
*Chemical Sympathectomy. H. A. Haxton.—p. 1026.
Eosinophilic Xanthomatous Granuloma with Honeycomb Lungs. T. Parkinson.—p. 1029.
Acute Pneumonitis in a Beryllium Worker. G. R. Royston.—p. 1030.
Infective Hepatitis and Portal Cirrhosis. K. Damodaran.—p. 1032.
Treatment of Abortus Fever with Sulfonamides and Blood Transfusion. C. Romer.—p. 1035.
Treatment of Herpes Zoster with Liver Extract. H. S. Gaskell.—p. 1037.

Lumbodorsal Sympathectomy in Hypertension.—Harland and d'Abreu report on 24 cases of severe hypertension in which lumbodorsal sympathectomy had been done. The chances of permanently lowering the blood pressure are slight; retinopathy may improve considerably; there is not enough evidence to indicate clearly the effect in hypertensive heart disease—some patients may appear to improve temporarily, but this is unlikely with severe disease; operation causes striking symptomatic relief, with notable gain in weight, and in primary malignant hypertension the malignant phase may disappear. In a properly selected case the relief is greater than that which can be obtained by medical treatment alone. Such cases are not numerous. The operation should be limited to patients with severe and rapidly progressive disease with severe symptoms referable to their hypertensive state which comply with the following conditions: age less than 50 years; the renal function should be good; there should be no evidence of coronary or cerebral artery disease, and there should be no severe heart disease or heart failure. Operation in cases of early and mild disease is not advisable.

Painful Amputation Stumps: Percussion Stump Neuromas.—Russell cites cases which indicate that treatment at the periphery may prove successful. This possibility was considered because nerve endings in the skin are rendered insensitive by occupations which involve repeated minor trauma or prolonged firm pressure on the skin, because conduction of a mixed nerve is easily interrupted by repeated pressure and because the regenerating nerve fibers in an amputation stump are likely to be no less vulnerable to minor trauma or pressure than are normal nerves and nerve endings. The method tried was deadening of the neuromas with procaine and percussion for ten to fifteen minutes with a piece of wood. Later, the use of a local analgesic was discontinued and a sphygmomanometer cuff applied instead. If the stump is too short for the cuff, hypalgesia of the neuromas can be obtained by prolonged pressure on them. The application of pressure is just as effective as hammering in abolishing the stump pain. Bruising of the stump should be avoided. Treatment at first must be repeated at least twice daily; soon one treatment a day is usually sufficient, and the patient learns to knock away his phantom pain whenever it becomes troublesome. The reappearance of long vanished parts of the phantom and of preamputation sensations was experienced during percussion.

Chemical Sympathectomy.—Haxton cites evidence which indicates that aqueous phenol should be a useful agent for paravertebral injection of the sympathetic chain where interruption of activity longer than that provided by procaine is required. He used such injections in the treatment of vascular disorders in about 220 cases. The experience has shown the treatment to be of value and worthy of addition to the surgeon's armamentarium. The author used 10 to 12 cc. of 6 or 10 per cent phenol in aqueous solution. The injection results in destruction of the ganglion cells, with a consequent interruption of sympathetic activity which can persist for at least two years. It is likely that some sympathetic activity will return in most cases, as also happens after open operation; but the method has the merit, denied to the operation, that it can be easily and rapidly repeated if necessary. Complications are slight and much less troublesome than those following alcohol injections. The method should be employed only by those who have had much expe-

rience with paravertebral injection of the sympathetic chain with local analgesics, since injection of phenol into the theca or a blood vessel would probably have serious consequences. Compared with open operation, chemical sympathectomy is a relatively minor ordeal for the patient, necessitating no rest in bed (most patients have been treated as outpatients). Sufferers from vascular disorders will much more readily submit to this than to the major operation of open sympathectomy, and the treatment can be employed in cases in which operation is considered unjustifiable because of the age and general condition of the patient or because the chances of improvement are insufficient, e. g., in claudication and chronic ulceration of the leg.

Lancet, London

1:987-1030 (June 11) 1949

Feeding of Premature Babies. F. J. Ford.—p. 987.
Testicular Pain: Its Significance and Localization. F. R. Brown.—p. 994.
Effect of Tetraethylammonium Bromide on Kidneys. K. Aas and E. Bloch.—p. 999.
*Sudden Death from Tetraethylammonium Bromide. M. Schwartz.—p. 1001.
Factors Affecting Response of Immunised Guineapigs to Antigenic Stimulus: Further Observations. P. Hartley and O. M. Hartley.—p. 1003.
Acute Jejunitis: Report of Case. A. G. Young.—p. 1005.
Hormone Treatment of Sexual Offender. F. L. Golla and R. S. Hodge.—p. 1006.

Sudden Death from Tetraethylammonium Bromide.—Schwartz points out that the tetraethylammonium ion temporarily blocks the autonomic ganglions and that this fact has encouraged its diagnostic and therapeutic application. Thousands of patients have been treated with tetraethylammonium bromide or chloride. It is held to be harmless, although some serious reactions have been observed. In 1947 the author treated 7 patients with bronchial asthma with this drug. In the first 6 cases the effect on the asthma was slight; in 2 cases tetraethylammonium bromide checked the attacks, and in the remaining 4 the asthma was slightly aggravated. The dosage was 300 to 400 mg. injected intravenously. In none of the 6 cases were any alarming side effects observed. The seventh patient, a man aged 63, died immediately after the injection of the drug. Necropsy was done, and, although the immediate cause of death could not be definitely established, there is no reason to suppose that anything but the tetraethylammonium bromide was responsible. The patient had been given an intravenous injection of a 10 per cent solution of tetraethylammonium bromide. After forty seconds, during which time 230 mg. had been injected, the patient suddenly became pulseless and stopped breathing. Injection of epinephrine and artificial respiration with oxygen were of no benefit. It seems that the response to tetraethylammonium bromide may be greater in patients with asthma than in normal persons. Because of this risk and because tetraethylammonium bromide does not seem to be particularly effective against asthma, its use in patients with asthma is not advisable.

Medical Journal of Australia, Sydney

1:697-732 (May 28) 1949

*Assessment of Streptomycin in Medical Practice. D. B. Rosenthal.—p. 697.
Assessment of Streptomycin: Surgical Aspects. J. Hayward.—p. 706.
Treatment of Anemia. R. Jeremy.—p. 711.
Some Problems in Surgery of Gall-Bladder. V. Hurley.—p. 713.
Substitute for Buttermilk and Its Use in Infant Feeding. R. H. Crisp.—p. 717.

Streptomycin in Medical Practice.—Rosenthal states that streptomycin is the drug of choice in the treatment of generalized hematogenous or miliary tuberculosis, tuberculous meningitis, ulcerative tracheobronchial tuberculosis, tuberculous pharyngitis and laryngitis, tuberculous enteritis and peritonitis, and draining cutaneous sinuses. It is probably of value in genitourinary and bone and joint tuberculosis. In pulmonary tuberculosis streptomycin is indicated as follows: in acute pneumonic and bronchopneumonic types; in acute exacerbations in chronic infections; in the progressive exudative type; in association with surgical treatment, including all forms of collapse therapy, on a planned regimen; in advanced cases for symptomatic benefit or relief; in any stage or type of infection with which is associated advanced or progressing laryngeal or intestinal tuberculosis. Streptomycin is not indicated in early minimal lesions, in tuberculoma, in chronic fibrocavernous disease without manifest activity or in tuberculous empyema. Streptomycin is generally not effective where caseation predominates, as in chronic pulmonary tuberculosis and in caseating lymph nodes before drainage.

Progrès Médical, Paris

77:241-272 (June 10) 1949

*Treatment of Postphlebitic Sequelae. R. Leriche.—p. 243.
Considerations on Phlebitis. E. Chomé.—p. 252.

Postphlebitic Sequelae.—According to Leriche, circulation remains impaired after thrombosis of a large venous trunk in spite of the use of heparin, even in cases in which the permeability of the thrombosed area has been restored. There may be stasis, fatigue, pain and trophic disturbances. Satisfactory results were obtained with resection of the thrombosed iliac vein with or without ganglionectomy in 6 cases, resection of the superficial femoral vein in 1 case and of vena cava in 1 case. Good results were obtained and maintained for twenty-two years with the resection of a 2 cm. segment of the femoral vein in the median part of the thigh combined with perifemoral sympathectomy in a man aged 26 whose postphlebitic syndrome after typhoid was complicated by left phlebitis; the obliterated area itself could not be localized and was therefore beyond reach. Good results were obtained and maintained for twelve years with the freeing of the femoral vein from thick fibrous tissue in the area of the fracture in a young man who had sustained a fracture of the femur followed by a painful postphlebitic syndrome. The resection on the vessel was combined with perifemoral sympathectomy. Removal of saphenous varicosities was successfully performed in several cases of painful disturbance after an old phlebitis. This method of treatment may be preferred to that of sclerosing injections. Lumbar sympathectomy was performed in 28 cases of phlebitic sequelae in which follow-up was continued two to eleven years. Results were excellent, particularly in cases in which operative intervention was performed early. Unilateral sympathectomy was effective on both sides. There was little improvement in patients with pronounced edema. Peripheral neurotomy proved useful in cases of refractory pain. Lumbar infiltration or intra-arterial injections of procaine hydrochloride should be employed as a rule in the initial treatment of ulcers of the leg. Grafting should be performed only after removal of the adjacent vein.

Wiener medizinische Wochenschrift, Vienna

99:229-248 (May 21) 1949. Partial Index

*Endoscopic Transpleural Splanchnicotomy According to Kux, a New Method for Treatment of Gastric and Duodenal Ulcers. W. Baumgartner.—p. 229.
Treatment Aimed at Correction of Defective Vegetative Regulation. W. Birkmayer.—p. 230.
Etiology and Treatment of Indolent Ulcer of the Leg. E. Rappert.—p. 235.

Splanchnicotomy in Treatment of Gastric and Duodenal Ulcers.—Baumgartner treated 25 patients with ulcers of the duodenum or stomach (demonstrated on roentgenologic examination) by endoscopic, transpleural splanchnicotomy. The operation is carried out with a thoracoscope to which an injection apparatus had been added. The thoracic sympathetic trunk and both splanchnic nerves are clearly visible. Infiltration of the latter where they arise from the ganglionated trunk with several cubic centimeters of procaine hydrochloride is followed immediately by division of the nerves with the electric current applied by means of a specially constructed wire loop. Roentgenologic examination of the patients was performed postoperatively at four week intervals. Not a single niche could be demonstrated after twelve weeks. The patients' weight was increased by 8 to 12 pounds (3.6 to 5.4 Kg.). Appetite was good, patients were not restricted to a diet, they smoked and resumed their work. There was temporary constipation for three or four days after the operative intervention, followed spontaneously by regular bowel movements. In contrast to observations by Dragstedt, the author suggests that the sympathicotonic angiospasm and circumscribed atony of the wall in the ulcer area are to be considered as primary factors, while vagotonic spasm of the muscularis mucosae, spasm of the ring segment, hyperperistalsis and hyperacidity are secondary reactions within the vegetative antagonism.

Book Notices

Pathology of the Nervous System: A Student's Introduction. By J. Henry Biggart, C.B.E., M.D., D.Sc., Professor of Pathology, Queen's University, Belfast. Foreword by Professor A. Murray Drennan, M.D., F.R.C.P.E., F.R.S.E. Second edition. Cloth. Price, $6. Pp. 352, with 242 illustrations. Williams & Wilkins Company, Mt. Royal & Guilford Aves., Baltimore 2, 1949.

This is the second edition of an extremely practical and easily read text on pathology of the nervous system for the undergraduate student. There are 242 illustrations and 10 colored plates and 352 pages. Several of the chapters of the first edition have been rewritten, and in others new sections have been included. The book is an outgrowth of lectures given by the author to his medical students. There are fourteen chapters starting with the neurone and its reactions to disease and terminating in tumors and defects of development in the nervous system. The author wants the student to understand neuropathology in its relation to general pathology because the same problems concern both. This book is one of the best on pathology of the nervous system because it discusses the practical and true pathologic findings. The author has kept controversial discussions out of his text. This book is highly recommended to the undergraduate student because the subject matter is easy to read, clearly understood and interesting. The illustrations are excellent.

Constructive Uses of Atomic Energy. Edited by S. C. Rothmann. By Samuel K. Allison and others. Cloth. Price, $3. Pp. 258, with illustrations. Harper & Brothers, 49 E. 33d St., New York 16, 1949.

The fourteen chapters of this book are written by different authors, and four deal with subjects of general interest to the medical reader. The chapter on "The Use of Tracers in Biology" by G. C. Butler is a concise summary of the subject in 14 pages, with enough detail to keep it from being vague. In "The Medical Uses of Atomic Energy" C. P. Rhoads gives an absorbing general account of the clinical application of radiophosphorus and radioiodine. In "Radioactive Tracers in Pharmacy" John E. Christian gives interesting details of studies on the rate of absorption of drugs from enteric-coated capsules, the preparation of radioactive galenicals by growing plants in radiocarbon dioxide, and so on. In a too brief chapter of 4 pages G. Failla discusses "Nuclear Physics and Medical Research." A 31 page glossary informally adds many items that do not occur in the text. The book is well indexed and illustrated with beautiful new photographs.

The Ethics of Sexual Acts. By René Guyon. Translated from the French for the First Time by J. C. and Ingeborg Flugel. With an Introduction and Notes by Norman Haire, Ch.M., M.B. With a new Introduction by Harry Benjamin, M.D. This Book is the Authorized English Translation of the French Volume, La légitimité des actes sexuels. Second printing. Cloth, $4. Pp. 383. Alfred A. Knopf, Inc., 501 Madison Ave., New York 22, 1948.

The philosophic aspects of sex are seldom considered by the medical profession. This book, published first in 1934 and reprinted in 1948, is devoted entirely to such a consideration. It is the author's view that the whole trouble about sexual acts is their inclusion in moral codes and that the concept of sin brings on mental disturbances which might not otherwise develop. His point of view can be condensed into a few words which were the title of a song that had much popularity in the United States recently. The eminent French author is convinced that there is no harm in "Doing What Comes Naturally."

Canine Surgery: A Text and Reference Work. Edited by H. Preston Hoskins, V.M.D., and J. V. Lacroix, D.V.S. The Work of Twenty-Four American Authors. Cloth. Price, $12. Pp. 565, with 345 illustrations. The North American Veterinarian, Inc., Box 872, Evanston, Ill., 1949.

This is a text and reference book on surgery of the dog for students and practitioners of veterinary medicine. Twenty-four authors contribute thirty-one chapters on a wide variety of topics including anatomy, physiology, surgical principles, sterile technic, preoperative and postoperative care, surgery of the various systems and fractures. Diagnosis of the various conditions requiring surgical treatment is well covered, and there are many photographs of lesions. This book will probably be of some help to medical research scientists who use dogs.

Physiology of Exercise. By Laurence E. Morehouse, Ph.D., Associate Professor of Physical Education, The University of Southern California, Los Angeles, and Augustus T. Miller, Jr., Ph.D., Associate Professor of Physiology, University of North Carolina Medical School, Chapel Hill, North Carolina. Fabrikoid. Price, $4.75. Pp. 353, with 52 illustrations. C. V. Mosby Co., 3207 Washington Blvd., St. Louis 3, 1948.

The authors point out in the preface that this short monograph was prepared because of their conviction that the physical potentialities of the human machine are revealed to the greatest advantage by an analysis of the manner in which they meet the exacting requirements of exercise. The earlier chapters deal with the essential physiologic background required for an understanding of the response of the body to exercise. Only an elementary acquaintance with some of the basic principles of chemistry and physics has therefore been taken for granted with respect to the reader. Later chapters are concerned with skill, endurance, fatigue, training, environmental temperatures and other topics—all pertinent to work performance. A concise and well selected bibliography will be found at the end of each of the thirty chapters of the book.

The authors appear especially well qualified to present the physiology of exercise. One of them, in addition to a background of physical education, was a research fellow at the Fatigue Laboratory of Harvard University. In consequence, many of the experimental studies reviewed were carried out in that laboratory, particularly as related to the physiologic effects on men at hard work, on the treadmill or under other controlled laboratory conditions.

The work is of special value in bringing together in concise form the significant advances in the field just prior to and during the recent war. The collection of this material would ordinarily entail an extensive search of the literature. The book should be useful for reference and as a textbook in colleges and professional schools.

Pageant of Life Science. By H. W. de Laubenfels, Ph.D., Professor of Zoology, University of Hawaii. Fourth edition. Cloth. Price, $5.95. Pp. 497, with 1021 illustrations, including 748 drawings by the author. Prentice-Hall, Inc., 70 5th Ave., New York 11, 1949.

This is a beautifully produced textual and pictorial presentation of scientific information pertaining to living things. It deals with five thousand separate subjects and twenty-eight regions of natural science, such as general biology, the biology of the human being and of plants and animals and so-called social biology, which has to do with the effects on living beings of their surroundings, ancestors, eugenics and evolution. The book is richly illustrated; there is scarcely a page without a line drawing, diagram or photograph. There are even touches of humor, such as the cartoon showing the tiger mother saying to her cub, "Eat the roughage too, dear," while in the picture are shown shoes and spectacles left over from the otherwise completely devoured victim.

There is nothing in the book to indicate for what age levels it is intended, but it should be a useful reference book at the high school level and in colleges. The subjects are well organized, and the explanations, as well as the illustrations, are notable for their concise clarity. No one who has access to this book need remain confused about the scientific facts relating to living things.

How to Be Healthy in Hot Climates. By Eleanor T. Calverley, M.D. Cloth. Price, $3. Pp. 275. Thomas Y. Crowell Company, 432 4th Ave., New York 16, 1949.

This book is a presentation of basic information that travelers need in planning trips or residence in tropical countries. Special consideration is given to safe water supplies, proper diet, vitamin needs and care of the skin and eyes. Intestinal diseases, malaria and other miscellaneous diseases known to be of more frequent occurrence in tropical areas are well described. Appendixes on caloric value of foods and caloric requirements in the tropics, information on communicable diseases and basic sick room supplies are furnished.

This book is primarily for the laity. It does not furnish information that is not available elsewhere in general medical treatises on tropical diseases. Nevertheless, anyone preparing for life in tropical climates can obtain much compact and useful information from this volume.

Queries and Minor Notes

THE ANSWERS HERE PUBLISHED HAVE BEEN PREPARED BY COMPETENT AUTHORITIES. THEY DO NOT, HOWEVER, REPRESENT THE OPINIONS OF ANY OFFICIAL BODIES UNLESS SPECIFICALLY STATED IN THE REPLY. ANONYMOUS COMMUNICATIONS AND QUERIES ON POSTAL CARDS WILL NOT BE NOTICED. EVERY LETTER MUST CONTAIN THE WRITER'S NAME AND ADDRESS, BUT THESE WILL BE OMITTED ON REQUEST.

AUREOMYCIN

To the Editor:—It has been my impression that the gastric irritation following the oral administration of aureomycin has been diminished by the use of colloidal aluminum hydroxide. Is there any evidence that the combined use of these two products diminishes the absorption or efficacy of aureomycin?

H. King Wade, M.D., Hot Springs, Ark.

ANSWER.—Knowledge concerning the factors which determine the absorption and excretion of aureomycin is not exact, because of the difficulty of measuring accurately, by biologic methods, the amount of the antibiotic which may be present in body fluids or tissues. A definite statement cannot be made regarding the effect of administration of preparations of aluminum hydroxide in conjunction with aureomycin. However, clinical observation would lead one to believe that neither the absorption nor the efficacy of aureomycin is changed by or is the result of the concomitant administration of preparation of aluminum hydroxide.

SKIN GRAFTING FOLLOWING MALIGNANCY

To the Editor:—Is there any risk of one's stimulating revival of malignancy locally in grafting normal tissues on operative wounds for cosmetic purposes after removal of malignant tumors, as those of the breast? With respect to normal tissues, I am inclined to doubt whether the tissues taken from unaffected areas of the same patient are really normal. My patient has a malignant disease of unknown origin.

Harry Marcus, M.D., Bronx, N. Y.

ANSWER.—If the malignant condition which made the original operative procedure necessary has been completely eradicated, there is no increased danger in one's performing a skin graft on such a patient. However, if the malignant tissue has not been entirely removed but is entrapped in scar tissue produced by the surgical procedure, or roentgen rays or radium which might have been administered, then cutting into a tissue to prepare the field for grafting may free these cells and hasten recurrence. It is, therefore, an accepted rule that skin grafting should not be carried out until sufficient time has elapsed to indicate the complete removal of the primary lesion.

UNDEVELOPED BREAST

To the Editor:—What is the significance of failure of development of the left breast in a 27 year old woman who is a virgin. The right breast is apparently normal in size, while the left is only half the size of the right but is otherwise normal. There is no evidence of failure of development or other abnormalities in any other part of the body. Is this breast apt to cause trouble in the future? Should she be allowed to nurse on this breast if she gives birth?

M.D., New York.

ANSWER.—Inequality in the size of the two breasts is common. Usually the larger breast is the abnormal one and is hypertrophied 10 to 25 per cent more than its fellow. Hypoplasia, accounting for inequality of mammary development, is rare, and usually the smaller breast is dwarfed by 25 to 50 per cent. There is no significance in such inequality of development other than cosmetic. It generally indicates a lack of sensitivity of the smaller breast to endocrine stimulation when unilateral hypomastia is present and an increased sensitivity to endocrine stimulation when unilateral hypertrophy is present. There is no reason to anticipate trouble in the underdeveloped breast, and there is no contraindication to nursing from both breasts if parturition occurs.

EPINEPHRINE FOR INHALATION

To the Editor:—I am told that the recent edition of the U. S. Dispensatory indicates that epinephrine 1:100, for inhalation, may be used in as large dosage as 0.5 cc. every four hours. This seems to be overdosage.

Alfred H. Weitkamp, M.D., Los Angeles.

ANSWER.—The dose of epinephrine 1:100 given by inhalation is stated in the most recent edition of the U. S. Dispensatory to be 0.5 to 1.0 cc. This is not an overdose, since in severe asthma even the largest recommended amount may be only partially effective. Both animal and clinical studies have shown that epinephrine in this quantity is not sufficiently absorbed into the general circulation from the bronchi and alveoli to produce more than transient and minor systemic effects. Obviously, the smallest amount which will produce the desired action should be used, and patients soon learn to adjust the dosage to meet their needs.

PARKINSON'S DISEASE

To the Editor:—A white, female patient, age 52, suffered an attack of encephalitis lethargica in 1939. After that her right arm became spastic; later the spastic condition spread over the entire body and both extremities. When I first saw her, about a year ago, she walked with a shuffling gait and had little use of her extremities. Her face is mashlike, and speech is difficult. She has the appearance of a patient suffering from advanced Parkinson's disease. She had been treated in several clinics with various belladonna and synthetic preparations (syntropan,® prantigone,®) with little or no benefit. What would you suggest in the way of treatment? Do you know of a hospital or clinic where special emphasis is given to the treatment of this kind of condition?

J. H. Chapman, M.D., Walterboro, S. C.

ANSWER.—Investigation of various preparations thought to be useful in the symptomatic treatment of Parkinson's disease is being carried out in various medical centers in this country. Recently a report from investigators at the Massachusetts General Hospital, Boston, on the use of panparnit® (diethylaminoethyl-1-phenylcyclopentane-1-carboxylate hydrochloride), one of the drugs under consideration, was published (Schwab, R. S., and Leigh, D.: Parpanit® in the Treatment of Parkinson's Disease, J. A. M. A. 139: 629-634 [March 5] 1949). Other reports are being assembled and will be published shortly. A number of the large neurologic clinics are interested in the treatment of Parkinson's disease and are staffed by physicians who can give expert advice.

CLINITEST

To the Editor:—Are clinitest urine sugar tablets recognized as satisfactory in tests of the urine for sugar in clinical work and insurance examinations?

Robert S. Srigley, M.D., Hollis, Okla.

ANSWER.—Clinitest is a good screening test. It may be considered reliable only if the urine does not contain sugar. If positive or doubtful reduction reactions are obtained, the urine should be reexamined with a reliable quantitative method.

TREATMENT OF ARTERIOSCLEROSIS

To the Editor:—In Queries and Minor Notes in THE JOURNAL, Aug. 27, 1949, a Delaware physician inquires "What is the present status of choline and inositol in the treatment of arteriosclerosis?" Your consultant answers, "Dr. Lester Morrison of the College of Medical Evangelists found that choline appears to have a slight favorable effect on cholesterol-induced arteriosclerosis in rabbits."

In my recently published conclusions, "Choline caused re-absorption of aortic arteriosclerosis in the majority of 23 rabbits whose lesions had been produced by cholesterol feeding." (*Proc. Soc. Exper. Biol. & Med.* 69: 360, 1948). "The oral feeding of 1.0 gram choline daily together with 0.5 gram cholesterol to 32 three-month-old rabbits prevented atherosclerosis in 75% of the animals at the expiration of the 92 day experimental period" (*Geriatrics* 4: 238 [July-Aug.] 1949).

These findings on the preventive action of choline against arteriosclerosis in the majority of cholesterol-induced lesions in rabbits were also reported by Steiner (*Proc. Soc. Exper. Biol. & Med.* 38: 231, 1938), Kenton and Silbowitz (*Proc. Soc. Exper. Biol. & Med.* 40: 71, 1942) and Braun, Andrews and Corcoran (*Geriatrics* 4: 178, 1949).

In the answer to the question there is a further statement, "No report of the use of choline in human arteriosclerosis has been found in the recent medical literature. This is also true for inositol." Hermann's results (*Exper. Med. & Surg.* 5: 149, 1947; *Ann. West. Med. & Surg.* 1: 361, 1947) in patients with coronary arteriosclerosis have been in accord with mine and have shown definite beneficial therapeutic results with choline or inositol. In a recent paper (*Am. Heart J.* 38: 471 [Sept.] 1949) my co-workers and I made the following report:

A series of 115 patients with proved coronary thrombosis and myocardial infarction were treated with choline after recovery from the immediate attack for periods of one to three years. These patients were compared with 115 control patients admitted alternately with the same diagnosis, who did not receive choline. The oral dosage of choline averaged 12 Gm. daily. It was taken for one year in 52 cases, for two years in 35 cases and for three years in 28 cases. In this series the subsequent mortality rate of patients who had suffered an acute coronary thrombosis with myocardial infarction appeared to be significantly reduced by the treatment with choline. These studies suggest that the lipotropic agent choline may be of value in the treatment of coronary arteriosclerosis and would appear to merit further trial and observation.

Lester M. Morrison, M.D., Los Angeles.